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THE LIBRARY QUARTERLY

A Journal of Investigation and Discussion in the Field of Library Science

Established by The Graduate Library School of the University of Chicago with the Co-operation of The American Library Association, The Bibliographical Society of America, and The American Library Institute.

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THE LIBRARY QUARTERLY

Volume VIII

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RESOURCES OF AMERICAN LIBRARIES¹

WILLIAM WARNER BISHOP

TO ANYONE attempting a review of the history of American libraries as a group it is apparent that their growth has been almost entirely individual, unplanned with reference to any other library or group of libraries. It is not too much to say that until recent years libraries have gone their own ways, developing for their particular needs, and concerning themselves almost wholly with their own problems.

While it is doubtless true that there is more uniformity in practice and in methods among the libraries of the United States and Canada than is to be found in any other single group elsewhere in the world, this uniformity is almost wholly one of method and of general policy. There appears to have been practically no concerted effort toward building up in the country as a whole a system of libraries designed to further the interests of scholarship and of research. In the last two decades, however, many voices have been raised to point out the need for co-ordination, for planning and development, for co-operation, and for system to take the place of indiscriminate and individual growth. Mr. Gerould, of Princeton, has voiced this conviction on several occasions and the author has dwelt on it

¹ An address before the Graduate Library School of the University of Chicago, May 26, 1938.

with insistence in many gatherings of librarians. The need for careful study and discussion of the actual resources of our American libraries is thus being brought home to us more and more with every passing year.

American libraries have been of several kinds. They may be said to have started with the founding of Harvard College in Cambridge in 1636. Following Harvard, William and Mary, Yale, Princeton, and numerous other schools in the eighteenth century and in the early nineteenth century developed small college libraries, which perhaps sufficed for the needs of instruction in the very restricted curriculum of those days and which contained enough books of a more erudite nature to assist professors in their own researches. The development of college libraries in the nineteenth century is familiar, and in the twentieth century the American college has taken on multi-form shapes and has developed to huge numbers of both students and institutions. There are over seventeen hundred colleges in the United States today, including colleges of liberal arts, colleges in universities, junior colleges, teachers colleges, technological colleges, and even colleges which are, in effect, little more than expansions of trade schools. And yet each of these colleges has a library of some sort.

For the last decade, with the aid of several colleagues, the Carnegie Corporation has been striving to stimulate an interest in the proper and adequate support of the libraries of colleges of liberal arts and of the junior colleges. I presume that in that effort I have been obliged to review and attempt to evaluate the resources and the services of more college libraries than have fallen under the observation and study of any other single individual among American librarians. Without citing statistics or calling any roll of names (honored or dishonored), I merely point to the fact that in the libraries of colleges there are found some millions of volumes for the use of some hundreds of thousands of readers. Few of them, however, provide materials for research in any considerable amount. They are chiefly devoted to the task of instruction.

Private libraries were found in the seventeenth and eighteenth centuries in the colonies along the Atlantic seaboard. One

may perhaps cite the library of Thomas Jefferson, which was purchased by the United States in 1815 to form the nucleus of the great Library of Congress which Jefferson fondly termed in his catalog published in 1815 the Library of the United States. Without attempting to cover the history of private libraries in this country, we may properly observe that America has not lacked great book collectors who have gathered private libraries of unusual distinction, many of which have been perpetuated as public institutions. One need not mention names or attempt to list the great collectors of the United States, from James Lenox down to Henry E. Huntington, William L. Clements, and J. P. Morgan. In that list should be included H. C. Folger, whose marvelous Shakespeare collection is now available to students in its beautiful building under the shadow of the Library of Congress in Washington. A few collectors of great private libraries such as Brinley, Hoe, and others did not perpetuate their libraries or turn them over to the public. But, in general, one may say that scholarship has been benefited enormously by the unselfish efforts of the great collectors of this country. Most of their treasures are now to be found either as special collections in great libraries or as special libraries endowed by their owners and placed in the care of trustees for the public benefit. It is to these collectors, far more than to any other single group, that American scholarship has been indebted for the provision of the materials for advanced research likely to enlarge the bounds of knowledge.

Most public libraries as we now term them began as subscription, or joint stock, libraries. Benjamin Franklin's activities in founding a subscription library in Philadelphia as early as 1732 are well known. Most of the great subscription libraries ultimately became municipally supported after Boston set the example by creating its public library in 1849. The development of the American public library in the nineteenth and in the twentieth century is a familiar phenomenon. Statisticians can list the thousands of such libraries and the millions of volumes which they contain. It should, however, be pointed out that most of these libraries are designed for the purpose of providing recreational reading in large amounts and for furnishing

information as desired to persons of no great scholarship. They are definitely, with a very few notable exceptions, not concerned with the provision of materials for research, although many of them have materials of the greatest value, particularly in the history of the various disciplines—materials which lie hidden in the mass of ordinary books accumulated over decades and too often undistinguished by any extraordinary care in selection or any definite effort to gather materials of interest primarily to scholarship alone.

There exist a few reference libraries of a public, or semipublic, character, which, as a rule, do not circulate books but provide the materials for investigation, much of it on a very high level. Included in this group are the Peabody Institute in Baltimore, the old Astor Library in New York, the Newberry and John Crerar libraries in Chicago, and others of that small but distinguished company of libraries founded by donors and benefactors who wished to build up in their communities libraries of research and higher study in the interests of scholarship for its own sake. The importance of these libraries is out of all proportion to their number and to their size. They have contributed standards of excellence for the emulation and imitation of neighboring libraries of quite different sorts and kinds.

There are also in the American library scene the libraries of some forty American universities. With a very few exceptions these have grown out of college libraries. Since the colleges have become universities and have added to the original colleges of liberal arts and theology, professional schools of law, medicine, engineering, and other highly specialized disciplines, they have been concerned with the provision of other materials than those needed for the instruction of students. While it cannot be said that they have always been adequate for this purpose, it is fair to say that since these colleges have become universities their libraries have held before them the goal of adequate provision of the materials for advanced research on the part of groups of professors and graduate students, chiefly candidates for the doctorate. This aim is a development of the last seventy-five years, perhaps even the last forty years. It has

been a conscious development, but in almost every instance that development has taken place within the institution itself and it has not been conditioned by or based upon co-operation with other libraries. One may take, for the sake of a single example, the library of Yale College founded in 1701, now become the library of Yale University, surpassing two million volumes, housed in a magnificent structure costing the enormous sum of nearly eight million dollars and worthily administered in the interests of scholarship as well as of undergraduate instruction. The growth of Yale University Library, not alone in number of volumes but far more in the services which it renders to scholarship, is typical of the sort of thing which has been going on in different degrees but with the same spirit in the libraries of all of our American and Canadian universities.

Along with this there has come the development of the libraries of governments—national, state, and municipal. An obvious example is the great Library of Congress, which, with true Anglo-Saxon lack of logic, is really our national library, despite its name. That library was founded in 1800 when the capital of the United States was moved to the District of Columbia. It began to grow rapidly with the administration of Ainsworth R. Spofford and has increased to far greater dimensions and to far more varied and useful services under the beneficent guidance of the present librarian of Congress, Herbert Putnam. It should be noted that this library exists primarily to aid two sorts of research: the provision of information needed in the conduct of the multifarious offices of the national government in Washington and pure research in the sciences, in history, and in various other disciplines. While the Library of Congress is primarily a legislative library, its services to the scientific departments of the government, to the judiciary, as well as to quasi-judicial officers and commissions, and to the various bureaus and departments, have become constant and are now indispensable. It would be practically impossible to carry on much of the administrative work of the government without the resources of the Library of Congress. Likewise,

scholars from all over the world resort to it because of its highly developed collections of materials for work in the social sciences, in history, in music, and in the fine arts, to say nothing of its great collections of rare books and manuscripts.

Practically every one of the great government departments likewise has libraries of its own which exist chiefly for the provision of information needed in the current conduct of those offices and in furtherance of investigation on a high plane. The libraries of the Bureau of Standards and of the Department of Agriculture are typical of many other libraries maintained by the government of the United States at Washington. Taken together, the library resources of Washington are now by far the most impressive of those to be found in any city of our country, not even excepting the huge collections in New York and in Boston-Cambridge.

As typical of the better of the state libraries one may mention that of the state of New York at Albany. Despite almost complete destruction by fire early in the century, that library has again risen to eminence, both in the character of its collections and in size. It performs a service to the legislature and to the executive departments of the state of New York similar to that performed by the Library of Congress in Washington. It likewise furnishes materials for scientific and historical investigation and exercises a wholesome and direct influence upon most of the libraries of the state through its extension and inspection services.

Taken as a whole, then, this rapid survey of the libraries of the country reveals a very large number of libraries reaching well over fifteen thousand, containing more than one hundred and fifty million books, among which are to be found certain special collections of extraordinary significance and value. The mass, however, cannot be held to have great significance for purposes of investigation and for research directed toward solving those pressing problems on which the advance of our civilization depends.

It may be well to emphasize the research library as distinct from the library of instruction or the library of recreation. The purposes and aims of both command our high respect and our

sincere admiration. A library which is an efficient teaching instrument is of enormous value to any program of higher education. A library which supplies information currently needed by citizens generally and which also undertakes the provision of the great literatures of the world for the benefit of an educated reading public is likewise significant in itself, admirable in its purpose, and worthy of our sincere respect and esteem. It is not often that one finds a library designed purely for research purposes. Almost all the major libraries of the country contain certain resources for research which may be of extraordinary value to an inquirer seeking materials which are not easily accessible. To cite one example, probably no municipal library is more sincerely and effectively devoted to the popular interest than is that of Cleveland. As a library owned by the people, used by the people, and designed for popular use in the best sense, the Cleveland Public Library stands pre-eminent, both as a system and as a great central collection. At the same time, in the White Folk Lore Collection the Cleveland Public Library contains research materials of extraordinary value, many of them of great rarity, particularly in the United States, and useful only to scholars of unusual ability who are able to read a considerable number of languages (more especially those of the Orient), and who are equipped in far more than ordinary fashion for advanced investigation in these recondite fields. This is but one instance out of literally thousands which could be brought forward to show that in our public libraries, our college libraries, and even in out-of-the-way and comparatively minor collections there are likely to be found the fruits of the collecting of someone gifted with unusual insight and patience and blessed with the money necessary to buy rare, costly, and unusual books.

In this connection the special libraries, it must be confessed, seldom offer the same materials for research which are to be found in more general collections. Libraries devoted to a single subject are usually gathered for the needs of persons actively engaged in the search for information useful in a business, in a laboratory, in a newspaper, etc. Such special libraries may, and indeed frequently do, contain a few very unusual and scarce books and journals but they seldom have the significance of the

special collections formed over a long period of years by enthusiasts who are gifted with unusual knowledge of a subject and who have that flair for books which baffles description and analysis. The library of an engineering firm, for example, must lay stress upon the recent character of its materials. Within a very narrow range such a library is probably almost complete. The direction, however, cannot afford to develop such a library on the historic side and the persons using it must necessarily rely on more general collections for a large amount of the information required in the conduct of their daily work. This does not mean that such libraries are not extraordinarily useful to the business or industry which supports them. It is, however, generally true that they are of limited use when it comes to the provision of materials for advanced research.

University libraries have developed more successfully certain research collections—they have consciously kept research interests in mind in developing their book collections. Such libraries generally reflect the somewhat narrow interests of a succession of specialists. Only the larger ones have been built up in a definite effort to provide the majority of the books of interest to research in large divisions of the field of knowledge. One library, for example, will purchase, in the interests of a particular professor or a particular group, all that it can get of the original editions of the Restoration drama. Very few university libraries have had the money to carry through on this generous scale the purchase of original materials for the entire field of English literature. It is true that as a group the university libraries have consciously tried, particularly in the last three decades, to gather and arrange materials for first-hand study of important subjects. But it is also true that they have generally done this without regard to the existence of similar collections even in the same town.

The materials of research are of several sorts. Primarily the lay public thinks of books alone; and it is, of course, a truism that books, whether of a monographic type or great compends, are the basic materials of investigation in most fields. The more recently developed subjects of study naturally require a generous provision of modern and up-to-date books. In dealing with

other subjects having a longer history, such as philosophy, medicine, the classical literatures, archeology, the fine arts, etc., directors of libraries have necessarily endeavored to develop on the historical side, trying consciously to gather first the epoch-making books which have appeared since the invention of printing and later those significant works which illustrate the opinions and views current throughout the long history of the unfolding of knowledge in our Western world.

From the point of view of the historical scholar it is impossible to say that any book is "out of date." Of course a book which is not recent has generally lost its authoritative character as a purveyor of up-to-date information. It is, however, impossible to say, just because a book is old, that it is useless for many sorts of historical investigation. Anyone who thinks that it is possible to do research work only with "modern" and "up-to-date" books has completely missed the fundamental principle of research, which is progress by the historical method. I suppose that no group is more insistent upon recent and diverse sources of information than are those engaged in scientific investigation in the fields of medicine and surgery. Yet these scientists work almost exclusively by the historical method, tracing down the gradual progress of knowledge in their subjects as they find it recorded in print over a period of decades, or even centuries. When I hear people proposing to relegate the books printed before the twentieth century to some limbo of forgotten materials I cannot refrain from a feeling of pity at their lack of comprehension of scientific method.

Books as they are ordinarily conceived—that is, monographs or compends—are but one part of the apparatus of scholarship. Within the last hundred years, and particularly within the last fifty, learned and technical journals and transactions of societies of all sorts have come more and more to occupy a position of prime importance among the materials demanded by the exacting scholar. I fear that even few librarians are conscious of the extent to which the provision of periodical or serial material has become an ingrained part of the work of libraries. I am convinced that at the University of Michigan the provision of annuals, serials, journals, transactions, and the serial publica-

tions of governments takes at least one-third of the total expenditures of the library for books and service. The day is not far distant when materials thus produced and published will require at least half of our money, half of our time, and perhaps more than half of our space.

When one sees the serried files of reports of decisions in the appellate courts, the long and (let us hope) unbroken ranks of statutes passed by the legislatures of the several states and of national governments, the solid array of transactions and proceedings of congresses, learned societies, institutes, universities, academies, and other societies; when the librarian reflects upon the cost of subscribing, recording, binding, and servicing these materials appearing periodically, he begins to see that modern scholarship and its mode of publication has laid upon him a burden far greater than that involved in the provision of some thousands or hundreds of thousands of individual volumes of works appearing in the old-fashioned form and issued each at one time, at a single place and by a single publisher, if not by a single author. The problems presented by the cataloging and by the servicing of this class of material, to say nothing of its indexing, abstracting, and arrangement, are daily growing more complex and more costly. The publications of societies and academies, for example, in both their original form and in their bindings, in the space they occupy, in the cost of indexing and analyzing, and in the cost of service, reach far higher figures than the cost of the same number of monographs of the more familiar type.

The number of journals is legion. American research libraries receive from four to fourteen thousand journals and continuations currently. In the single field of medicine and surgery the Army Medical Library reports a list of over eighteen hundred journals currently received. It is literally true that librarians will be obliged, in the immediate future, to devote to this type of publication a very considerable, if not the major, part of the incomes of their libraries. Newspapers fall also in the same class but present peculiar differences of their own, which may perhaps be solved for us by some of the newer inventions of microphotography. The provision, therefore, of materials ap-

pearing in serial form is certainly the heart of the research problem as it affects libraries. We shall never be free from the difficulty caused by the necessity of securing the out-of-the-way book and the obscurely published pamphlet, but we can count, I am certain, on less and less emphasis on materials of this sort and on more and more stress on the provision of current and bound magazines, chiefly of a technical character.

The problem presented by government publications is also a newer and very difficult form of the obligations laid upon a library primarily devoted to research. We older librarians have long been familiar with the serial publications of the United States government. We have wrestled with the "Congressional set" in its "sheep-bound" form and later in its buckram cover. We have struggled with the task of making sure that we have received the publications of the various departments of the United States government, and we have given more or less attention under greater difficulties to the receipt of the publications of our own state and of other states. Of late years stress has very properly been laid, chiefly through the Committee on Public Documents of the American Library Association, on the development of document centers in certain libraries strategically located in different parts of the country. Vast sums have been expended in an effort to build up complete collections of these publications, which are frequently fugitive, which almost never appear in the book trade, and which must be procured through personal solicitation and endless correspondence. These too present a problem of recording, of binding, of servicing, and particularly of indexing. The paper on which most of them are printed is not durable and I predict that within ten years we shall be forced to develop some photographic record of these ephemeral materials which may be reproduced as need arises in different libraries throughout the country.

The publications of other governments should concern us as much as those issued in our own country. In the United States there are very few reasonably complete sets of publications of the Dominion of Canada; in fact, nobody knows what constitutes a complete set of these publications. Ontario is as near a neighbor to Michigan as is Ohio or Indiana, yet I doubt if any

library in Michigan has a reasonably complete set of governmental publications issued in Ontario, and I am equally certain that no Ontario library has a reasonably complete set of publications emanating from the state government of Michigan. The publications of the government of Great Britain are extremely numerous, and incidentally are very well indexed and capable of satisfactory arrangement. These too, however, have suffered a very rapid development since the World War—a development which has taxed the power of most American research libraries in procuring the greater part of the significant publications of Great Britain appearing currently. The publications of the Continental governments are likewise of great interest and value, and, aside from a few centers, particularly Washington, New York, and Boston, they are to be found in far too small numbers in the United States. Few, if any, American libraries aside from the Library of Congress have had the means to gather with even fair success the publications of Central and South American governments, those of the Orient, and the whole of Africa, to say nothing of the publications of governments, both dominion and state, in Australia, New Zealand, and India. It is perfectly true, however, that our research men are likely to call upon us for these publications at any moment, and they are frequently stopped in their work by the fact that we cannot produce them.

And last among the materials for research we must include collections of manuscripts. Now these collections are always individual and special. Each manuscript is unique. There may be copies of it, but this is most unlikely. The smallest library, and the most unconsidered collection, may contain manuscript sources of prime value to historical investigation. It is impossible to set up any standard or measuring stick, save that of size and number of pieces, by which to compare and evaluate a collection of written materials. A priceless letter of George Washington, for example, may be found in an obscure public library which has received it as a gift from some benevolent donor. Such a letter may frequently remain unknown, even with all the efforts which have been made in the last few decades to collect and publish all the writings of George Washington.

Collections of manuscripts are of fundamental importance but they require individual description and cannot be checked against any standard catalog or list.

There is a very uneven distribution in the United States and Canada of the materials in these four fields. There is a great concentration of books in the eastern libraries between the Appalachian Mountains and the Atlantic Ocean. A good example of this concentration is to be found in the list of source materials for European history prepared by E. C. Richardson and published in 1912 just before the outbreak of the World War. Dr. Richardson's list was in his well-known "title-a-line" form and left very much to be desired from a cataloging point of view. There are listed some thousands of titles, however, of source materials for European history compiled from various authoritative bibliographies. Richardson noted the location of copies wherever he could find them, but anyone examining that book would be alarmed at the small number of copies located and at the even smaller number located in libraries in widely separated parts of the United States. I believe that a few libraries have deliberately set themselves the task of gathering the materials thus listed, and I understand that at least one, the Library of Harvard University, now possesses practically the entire collection. I am perfectly sure, however, that not even the majority of the titles enumerated in this list are to be found at the present time in the Great Lakes region. They are practically all fundamental series, and one cannot look at the list complacently when he reflects that most of the great European libraries contain them all and that almost none of the great American libraries contains even half of them.

Rare books in the collector's sense are likewise concentrated in very large measure on the Atlantic seaboard. Important collections of Americana will serve as a useful example. Without attempting anything like a complete list of them, one notes that in New England there are the great collections found in Cambridge and Boston, the John Carter Brown Library in Providence, the American Antiquarian Society in Worcester, and the Library of Yale University, to say nothing of smaller collections of lesser note but frequently of high distinction. New

York likewise is rich in Americana, thanks to James Lenox, to the founders and directors of the New York Historical Society and other similar libraries, and to certain great private collections which have come to rest in public institutions. Philadelphia is less rich, though no one could consider the collections of the Pennsylvania Historical Society in the field of Americana as negligible or even as unimportant. The Library of Congress is not so distinguished in Americana in book form. In fact, its collections rank below those of either New York City or Boston. Major collections of Americana west of Washington are found in the William L. Clements Library of American History in Ann Arbor, in the Ayer Collection in the Newberry Library, and in the Huntington Library in San Marino, California. It will be observed that there are but three major collections of Americana in the form of books to be found west of the Allegheny Mountains.

In the field of English literature one immediately notes that after Harvard, Yale, and the New York Public Library there come the Pierpont Morgan Library in New York, the Folger Shakespeare Library in Washington, the Wrenn Library in the University of Texas, and Mr. Huntington's unrivaled collections at San Marino. This does not mean that there are not significant and valuable collections in the field of English literature in scores of other institutions. But aside from those named there is none to rank with the collections of the British Museum or with the Bodleian, to say nothing of the Library of Cambridge University and the John Rylands Library at Manchester. English literature is the birthright of every American, but it is noteworthy that we owe to four private collectors whose materials have come to public institutions—J. Pierpont Morgan, Henry Clay Folger, Henry E. Huntington, and Thomas J. Wise—a great part of the extremely scarce original materials of English literature which are to be found in the United States.

In the field of early printing it is likewise noticeable that aside from the Wing Collection in the Newberry Library in Chicago one has to depend almost entirely upon the great collections on the Atlantic and Pacific coasts. There are good collections illustrating the history of early printing at numerous points,

but of the total number of books printed in the fifteenth century (reckoned all the way from forty to fifty thousand volumes), only one American library seems to possess as many as six thousand.

Time prevents an adequate review of the holdings of more ordinary books in the various European languages and literatures to be found in our American libraries or of the collections of works in Arabic and Hebrew, in Chinese and Japanese, to say nothing of those more esoteric and exotic tongues in which printing has been in vogue for a hundred years or more. Nor should the great collections of journals and transactions of societies be overlooked, although it is perhaps worth noting that the midwestern libraries have developed this field to a far greater extent than they have some of the more specialized fields just mentioned. I should like to emphasize the fact that this success in collecting in the less spectacular fields does not represent the investment of smaller amounts of money than would be required for the purchase of book rarities. On the contrary, I am inclined to feel that the actual investment, which includes labor costs as well as cash outlay in other forms, has probably been greater than would have been the cost of collecting in such a field as Americana. When one recalls the prices which have been paid by midwestern institutions for certain files of journals (running into the thousands of dollars) it will easily be observed that scores, if not hundreds, of early issues of English and American writers could have been purchased with the same outlay of funds.

Not only is there considerable concentration of the materials for research in certain definite areas of the United States, but there are certain areas most definitely ill supplied with research materials. One of these is the southeastern region, running from Virginia to Louisiana. While there are old and good libraries in this region, as a whole its provision of books in proportion to the population and in proportion to the number of institutions of higher learning is lower than it should be, and in some states it is even scandalously small. The Southwest, which may be held to include Arkansas, Oklahoma, Texas, New Mexico, and Arizona, likewise exhibits a huge area with a fairly good-

sized population, particularly in Texas, but poorly supplied with the materials of research. With the sole exception of the University of Texas there is no library possessing any considerable amount of the materials for research in this entire area, which is as large as the whole of France and Germany combined. The Rocky Mountain area is likewise notoriously ill provided with books, while the plains states of Montana, the Dakotas, Nebraska, and Kansas, with a few honorable exceptions, are quite devoid of libraries containing materials for original investigation on a large scale and of an advanced character. The upper portions of the Great Lakes region—i.e., northern Minnesota, northern Wisconsin, the Upper Peninsula of Michigan, and most of Ontario—despite a fairly large population, do not shine in the provision of libraries. One may truthfully say that there are poorly furnished areas also in various parts of the country not enumerated above. Maine has but few books, as does Florida. The same thing might be said of Georgia, of West Virginia, etc. Interlibrary loans, the use of photostats, and the recent introduction of microfilms are doing much to mitigate this uncomfortable, and indeed almost hopeless, situation. It seems to me, therefore, as it has seemed to the Board on Resources of American Libraries, that any comprehensive study of this problem, and particularly of the problem of the distribution of materials, must be based upon actual knowledge of existing conditions as developed by competent observers and not upon theory.

It is on knowledge alone that we dare base any plan for remedying a situation in some respects eminently unfortunate. A single example will suffice to drive this home. A few years since certain enthusiasts convinced the Social Science Research Council that there ought to be libraries on railroads and other means of transportation at five centers in the United States—Boston, New York, Washington, Chicago, and San Francisco. These people, who, I may remark, came from Boston, deliberately ignored, or were ignorant of, the fact that at the University of Michigan, the University of Illinois, and Stanford University there were already in existence flourishing collec-

tions on railroads and transportation, far larger and far more important than any collections existing at that time in Chicago or in San Francisco, and fully comparable to collections existing in Boston, New York, and Washington. Any theoretical scheme of distribution of materials which ignores existing collections of distinction and of large size must necessarily fall to the ground, as did this ingenious plan presented to the Social Science Research Council. When once the facts are known, it is possible to plan additions to existing collections and to place materials in the areas where no important collections at present exist.

As a basis for providing accurate information, surveys are necessary. The only survey on a broad scale which has been attempted up to the present time is that just completed covering the southern area of the United States, or rather covering the southeastern area and a portion of the southwestern. This survey has been financed by the General Education Board and has been conducted by a group of librarians headed by R. B. Downs, of the University of North Carolina. Mr. Downs has had able and devoted assistance from a number of librarians in the area covered. The survey has been factual. It avoids enthusiastic description of minor collections, and the point of view has been detached and objective. It will soon be published with an elaborate index and should serve as a definite statement of conditions in 1937 in an area with comparatively limited library facilities extending over a large territory and comprising a population of great size. There are certain defects in this survey. In particular there are no comparisons against any standards just because there are at present no standards commonly acknowledged. As a first attempt I feel sure that the survey made by this group will be regarded as a successful contribution toward our knowledge of the library facilities of the United States. Perhaps its greatest value is the description of collections of manuscripts, many of them previously unknown or at least not widely known. These descriptions are a genuine contribution to the means for research in the United States. Under the direction of this survey there has been compiled and

published a list of journals taken in the libraries of this region. This list contains almost eight thousand titles and has already proved a basis for successful efforts toward enlarging the number of journals available in the southeastern region.

In preparation for the survey Mr. Downs prepared a carefully drawn and somewhat elaborate manual as a guide to the surveyors. While this manual has not yet been published, it deserves to be widely known. It is most suggestive and thoroughly practical. If the survey had been made on any other basis than this sort of careful preparation and detailed direction, the chances are that the results would have been far less valuable. In fact, almost any survey of this sort is likely to develop value in exact proportion to the amount of care in planning which had preceded the work of visitation and study of libraries. Until one comes to wrestle with the actual problem of adequately describing any large library or any group of libraries he will not see and feel the need for this type of preliminary study and detailed directions. It has been my privilege in the last decade to arrange for careful visits of inspection of the libraries of over three hundred and fifty colleges. Out of this experience there have grown certain convictions, the chief of which is the need for careful advance preparation on the part of the visitors or surveyors. It is only by means of this planned investigation that one arrives at anything like uniform results. The Southeastern Committee explored the library resources of the whole region between the Potomac River and the western boundary of Texas, coming as far north as the Ohio River and the southern boundary of Missouri. The area thus covered is so large and so diversified, and the libraries are so numerous as to present very great practical difficulties. Imagine, then, with what difficulty a survey of other portions of the country containing larger population areas and many more libraries would be made. For example, if one were to survey the library resources between the Potomac River and the Canadian boundary running as far west as Pittsburgh and Buffalo, he would have to encounter libraries holding at least six times

as many volumes and probably ten times as many special collections as were discovered in the southeastern area.

Similar surveys are under study in the Rocky Mountain area and in the Pacific Northwest under the general auspices of the Board on Resources of American Libraries and with the active co-operation of the Rocky Mountain Bibliographical Center in Denver and of the Library Association of the Pacific Northwest. It is too early, however, to announce any definite plans for surveys in these regions. The Rocky Mountain Bibliographical Center at Denver is not only gathering lists of materials of various sorts but is, I understand, planning a rather elaborate and detailed union catalog of the entire region.

One very definite survey has just been completed under the auspices of the American Council of Learned Societies. Seymour de Ricci, of Paris, with the competent aid of J. R. Wilson, of the Library of Congress, has issued two volumes describing the collections of medieval manuscripts in western European languages to be found in libraries in the United States. A third volume containing the index is in process of publication. It is now possible to discover exactly what medieval manuscripts have made their way to the United States, and I think most persons who have consulted the volume are agreeably surprised to discover how much of prime importance and value has been acquired by American libraries, chiefly with the aid of certain great collectors, among whom J. P. Morgan, of New York, and Henry Walters, of Baltimore, stand pre-eminent. It is hoped to follow this survey of medieval manuscripts by catalogs of manuscripts of other sorts. There is no similar list for oriental manuscripts, for example, or for manuscripts of more modern authors, many of which are found in large numbers in certain American libraries.

It would not be fair to close this hasty survey of the provision of materials for research in libraries in the United States without some consideration of the extraordinary task which American librarians have faced in the last seventy-five years. Not only have these librarians been obliged to build up new

libraries, or old libraries on a new scale, by adding a judicious selection from the huge stream of materials currently issuing from the press, but they have also been obliged to perform within this comparatively brief period the task which European libraries have in most instances been steadily pursuing through centuries. It has been necessary to gather here materials for research in the historical, linguistic, literary, legal, medical, and social sciences, all of which have their roots far in the past. For centuries the printing press has been pouring out books on every conceivable subject, many of them books of monumental character, of lasting value throughout the ages. Long before the invention of printing authors were busy producing books, many of which were later printed and have taken their places in the great mass of materials for research. While it is true that the natural and physical sciences have been more largely developed in the last seventy-five years than in previous centuries, there yet exist and have been transported to the United States a great volume of materials in this field which were issued at an earlier date. We have really had to do here in a few decades the sort of thing which generations of librarians have been doing over a very much longer time in western Europe. Librarians alone could never have performed this enormous task in the creditable way in which it has been done in the United States. It has only been by the effective aid of trustees and administrators who have placed great resources at the disposal of librarians and by the extraordinary knowledge and tireless industry of some thousands of experts, chiefly university professors, that these materials have been selected and brought into our American libraries. We must not forget the leading role played by certain great book collectors and many others of lesser note. Nor must we overlook the constructive work, too often ignored, of the great booksellers who have fixed their attention not only on profits to themselves but on the provision of materials which otherwise would never have come to the attention of American librarians. It has been a great undertaking, and it is only by looking at it from a long-range point of view that we who have been so busily engaged in it can see

what has been done. The fact is that in a few sciences, at least, certain American scholars in favored localities have every advantage (except in the matter of medieval manuscripts) possessed by their European colleagues. And in many American libraries a scholar is given facilities for his work as well as materials upon which to labor which are not matched in any other country. We may properly claim, as American librarians, that we have done our share toward gathering the materials of research and have broken ground in ways and means of making these materials easily available to the inquirer.

While all this is, of course, a matter for congratulation, it is still true that we do not own by any means all the materials we should, nor do we know where all those materials which we have are located. It remains to note the means which have been taken up to the present day to make these large resources more easily available to scholars in this and other countries.

We have long since passed the stage where a printed book catalog will suffice to reveal the materials required by scholars. We have had to resort to card catalogs of various types and sizes. The chief of these is the great Union Catalog in the Library of Congress which is admirably housed in the new extension of the Library of Congress and now contains more than fifteen million cards.² Of course these do not represent fifteen million different books, because there are numerous cards for copies of the same title reported in different localities. Its basis is the printed catalog of author cards representing the Library of Congress itself. There are today over four million volumes in the Library of Congress, and I presume at least a million-and-a-half author cards are required to note the titles of these four million books. This Union Catalog holds also printed cards supplied by numerous libraries in the United States representing books not in the Library of Congress. It includes large portions of the catalog of the library of Harvard

² The Union Catalog of the Library of Congress is described in *Report of the informal conference on union catalogs, Library of Congress, April 17th and 18th, 1936*. Called by the A.L.A. Committee on Resources of American Libraries and the Carnegie Corporation (Chicago: American Library Association, 1936).

University copied at the expense of the Rockefeller Foundation some years since. Of recent years many of the larger libraries of the country have been reporting to the Library of Congress all books which their librarians judge to be of unusual importance as they are cataloged. In many cases these are recorded by additional printed cards from the Library of Congress. The University of Michigan, for example, manufactures some twenty-five hundred cards yearly by the lithoprint process and sends copies to the Union Catalog. During the last two years we have sent, in addition, cards for all the books placed in our rare-book rooms and for all acquisitions of unusual importance placed on our shelves or located in our departmental libraries.

The Union Catalog has serious gaps, however. While most of our large and important libraries have been following the process just detailed for the last few years, they all have numerous collections acquired in earlier years, cards for which have not yet been contributed to the Union Catalog.³ It should be noted quite definitely that the Union Catalog in the Library of Congress, great as it is, is but an imperfect instrument and represents only a portion of the holdings of American libraries which are conceivably of prime importance in research work. If we compare the Library of Congress Union Catalog with the great union catalog which has been formed as a basis for the *Deutscher Gesamtkatalog* now being published in Berlin, we shall see how great is the difference. The Berlin catalog contained originally the holdings of all the great libraries of Prussia; it now lists the holdings of all the great libraries in the German-speaking world. The entries have been made on a uniform plan. Their gathering has been supervised by a governmental agency, and one may confidently say that in the published volumes the contents of practically all the important libraries of Germany and Austria are fully displayed. We have absolutely nothing in the United States to compare with this—in fact, there is nothing like it elsewhere in the world. There is a good union catalog covering the university libraries of Holland housed in the Royal

³ Further discussion may be found in *ibid.*

Library of The Hague. In Great Britain serious attempts are being made, and have gone far toward realization, to list in a series of regional catalogs (and ultimately in a national union catalog) all the holdings of the British libraries except in the field of fiction. Still, while southeastern England and the London borough libraries have been fairly well covered, there is yet in the National Central Library nothing comparable with the great Berlin catalog now fast appearing in print.

The Union Catalog at Washington, however, can easily be made the basis of a much more complete survey of printed materials available in the United States. Every card which is added to it is so much definite information placed at the disposal of scholars. On the other hand, until steps are taken to add to the Union Catalog in Washington the older materials acquired by important American libraries, scholars will still be at a loss to locate many books essential to their researches. In the light of what we know now as to the nature and value of union catalogs, it is possible that it will be well to defer plans for extensive additions to the Union Catalog in Washington until more complete union catalogs or surveys of available literature in restricted fields of knowledge are completed and published covering the entire country.⁴

There have also been two other union catalogs practically completed within the last two years which exemplify very different methods of compiling bibliographical information: the union catalog of the Philadelphia metropolitan area and the union catalog located in Cleveland, covering a fairly wide region. Both of these deserve careful study, and great credit should go to the groups who carried through to practical completion the extraordinarily difficult work of assembling titles from numerous libraries. Any criticisms—and I confess I have plenty in mind—of these two efforts should not be held to detract from the merit of their promoters and organizers but are merely statements of difficulties inherent in the problem itself and in the methods followed.

⁴ For further discussion see W. W. Bishop, "Union catalogs," *Library quarterly*, VII (1937), 36-49.

The Philadelphia union catalog is confined to the Philadelphia metropolitan area. There are one hundred and twenty major libraries and some eighty minor libraries whose catalogs are reproduced in the cards of the union catalog, which is now housed in the Library of the Pennsylvania Historical Society. Both of these catalogs have depended very largely upon Works Progress Administration labor supplied by the United States government as a relief measure. The methods of compiling both catalogs have been almost wholly conditioned by the necessity of conforming to the regulations of the Works Progress Administration in its requirement that as many persons should be employed as possible rather than that the work should be done in a fashion to yield the best possible results. It has been necessary for the local committee in each case to find a place in which the work could be done, to secure directors and competent editorial supervision, and to proceed at a rapid pace, using the most up-to-date photographic methods for compiling data on films and employing fairly well-trained copyists to reproduce cards on the typewriter. It should be noted that in Philadelphia money was found to buy Library of Congress cards for titles for which individual libraries had employed these cards. The symbols of the libraries are stamped on the margin or on the back of the Library of Congress printed card. In Cleveland the Library of Congress cards have been copied on the typewriter because plenty of typists were available and there was no money for even the comparatively minor cost of Library of Congress cards.

The Philadelphia work is very nearly, if not entirely, completed, and arrangements have been made, at least temporarily, for the continued supply of cards from the libraries which were covered by the catalog. The promoters and organizers of the Philadelphia catalog seem confident that they have secured sufficient support so that they can continue not only the supply of cards but also their filing and housing, and provision for quick consultation and the supply of information. Of course the whole process is really meaningless unless arrangements are made for future growth of the catalog by the addition of titles

as acquired by the contributing libraries, for a certain number of catalog trays needed every year, for the labor of filing, for supervision and revision of filing, and unless facilities are provided for rapid consultation. Further, it is inevitable that it must be made possible to furnish information as to holdings to persons who send in an inquiry by mail, or even by telephone. In the comparatively small Dutch union catalog this is handled by a system of reply postcards. The inquiring library writes the author and title on the postcard and on the reply card, which bears a set of symbols for the different contributing libraries. If copies are located, these symbols are checked so that the library inquiring gets the information as to the location of anywhere from one to a half-dozen copies by return mail. It should be noted, however, that the Dutch libraries are fairly few in number, less than thirty, and that the inquiries are comparatively few. It will be a complicated and exacting task, running to a good many hours a day, to furnish information when the Philadelphia catalog gets into full operation. All of this will require a considerable amount of money each year, as well as the services of a thoroughly competent director. It is greatly to be hoped that funds will be forthcoming, if indeed they have not already been secured, to operate the Philadelphia catalog successfully. It has been compiled by ingenious methods, by great industry, and by devoted labor. It bids fair to prove an instrument of enormous value in the prosecution of research, particularly in a large city with numerous small libraries, many of which have special collections of great value and distinction with adequate funds for their maintenance and for additions.

The next step, however, with reference to the Philadelphia union catalog is not so clear. When once the labor of determining what books exist in Philadelphia and its environment has been completed, there remains the much more exacting and difficult task of determining in the general interest, what purchases ought to be made in order to round out the provision of library materials for Philadelphia's scholars. If the creation of the union catalog required unusual ingenuity and patience, as well as vision and enthusiasm, the much more formidable

task of building successfully on the foundation thus laid is likely to require all these qualities in an even larger measure.

The Cleveland catalog, which is now in process, has a decidedly different basis. Cleveland has no such accumulation of small libraries as Philadelphia and its suburbs. It has one huge public library with numerous branches. There are two universities and several colleges, with their general and special libraries. The planners of the Cleveland union catalog thought immediately in terms of a wider area. They began by asking the University of Michigan Library and Oberlin College Library to allow their catalogs to be filmed and copied. The official catalog of the University of Michigan Library was filmed more than a year ago, and work has been in progress on the copying of the cards. In addition, the Cleveland catalog includes a number of other libraries in the vicinity of Cleveland itself. It will be seen, therefore, that the Cleveland enterprise is a regional catalog.

Now in Great Britain regional catalogs have proved something of a success because of a system of "outlier" libraries organized by the National Central Library in London. These outlier libraries, while perfectly independent, are associated with the National Central Library in a plan for furnishing materials to scholars and students in their respective areas. Only when the facilities of these areas have been exhausted is the inquiry passed on to the Central Library in London. The demand comes not so much from scholars making original investigations as from students, both in the colleges and universities and in the wide field of adult education, who need books not found in local libraries in aid of their studies. It will be recalled that the various tutorial classes and other agencies of adult education have been developed in England to proportions entirely unknown in the United States. These regional catalogs, therefore, are of great assistance in locating materials needed in the course of study. They appear, however, to be employed to a lesser degree in an effort to locate materials needed in advanced research. There are two additional factors which have to be taken into account in considering the British plan for regional catalogs. One of these is the density of popula-

tion, many of the English counties having populations outside of the great cities of from six hundred thousand to a million people. Kent, for example, has over eight hundred thousand population and can hardly be compared with American rural counties. The other factor is the extreme smallness of the country from our point of view. This makes it possible for an inquirer to go to London, to Oxford, or to Cambridge at comparatively little expense in either time or money. Most scholars prefer to visit the British Museum, the Bodleian, or the Cambridge University Library, where they are almost certain to find the materials they want, rather than to seek extensively in libraries somewhat nearer their homes for materials which are almost certain to be scattered among a considerable number of libraries. This again presents a condition entirely different from that which we face in the United States. It is fifteen hours from Detroit to Washington, for example. A journey from California or Texas to Washington is a matter of several days, and even by air the time is longer than is required for a rail journey from most parts of the British Isles to London. In considering regional catalogs in the United States we have, therefore, an entirely different problem from that which is presented in Great Britain.

On the whole, it is questionable whether regional catalogs in America will prove to be worth the money and time invested in their manufacture and in their upkeep. When the University of Michigan Library in Ann Arbor can get a reply from the Union Catalog in the Library of Congress locating a book for a scholar in a reasonably short time, it seems folly to make an inquiry first in Cleveland, with the prospect of following it up later by an inquiry in Washington. The Washington catalog will serve scholars in the Cleveland area as well as will the Cleveland catalog, and probably much better. Careful study should be given to the question as to whether a regional catalog can justify itself. There is no question as to the value of a local union catalog. It is reasonable to assume that a locality is much larger than we used to think before the days of automobiles and subways. In the discussion at the Washington Con-

ference a locality was defined as an area which could be covered by an automobile moving in traffic in an hour's time. That is rather a rough definition but it is perhaps a good one. It takes practically as long in Ann Arbor to get a reply to an inquiry by mail from Cleveland as it does from Washington. When the inquiry is sent by air mail to Washington and comes back by the same process the answer arrives more quickly than it does from Cleveland when the letter is sent by the ordinary means of transportation. I have little doubt as to the convenience to inquirers in Cleveland of knowing that materials can be found in that city, but I doubt if there is much advantage to them in learning that books which they desire are to be found in Ann Arbor or in Detroit.

The fact is that regional union catalogs have not been carefully studied, nor for that matter has the cost of multiplication of union catalogs been worked out with any degree of success. It is a serious item of expense to communicate to the Library of Congress the additions to the University of Michigan Library, whether recorded on Library of Congress printed cards or on cards manufactured in Ann Arbor. The actual cost of the printed or lithoprinted cards, while not negligible, is not serious. The labor cost, however, is decidedly heavy and, if libraries are to be called upon to contribute to several union catalogs, the actual expense involved may well be prohibitive.

These considerations may seem to you to be a somewhat discouraging view of union catalogs as a basis for determining the location of materials needed in research. They are not in the least intended in that spirit, but it seems necessary to work out definitely all the elements of cost involved in any new plan, and it is further necessary to inquire which of various methods is the most practical in its results as well as which is the least expensive. I am convinced that it is necessary to give very careful study to these questions before adopting any general plan for local and regional union catalogs of all materials in all the libraries of a locality or of a region.

In fact, I am rather firmly convinced that union catalogs of a more specialized sort are likely to be more valuable in opera-

tion than general union catalogs intended to cover the entire holdings of a considerable group of libraries. An example of what I have in mind is the union catalog of medical literature in the city of Chicago, which is maintained at the John Crerar Library. A number of libraries contribute their entries for books and journals in the field of medicine and surgery and in allied disciplines to the John Crerar Library. This library files the cards thus contributed and undertakes to make the union catalog available to inquirers as well as to assist in securing access to the materials thus recorded. An inquirer in the field of medicine need, therefore, have no fear that he will miss anything locally available. The field is somewhat limited. Production in more recent years is largely confined to periodical literature, and the cost of operating the catalog is kept within reasonable limits, quite in keeping with the results. Similar union catalogs in highly specialized lines are to be found elsewhere in the country. A few of them are national in their scope, although most of these have not operated very successfully. In Texas, for example, a considerable group of libraries have agreed to contribute titles to a union catalog of materials for the history of Texas which is kept in the University of Texas Library. It would be quite simple to operate such a scheme in Michigan, and I believe it would be highly desirable. The field is limited, the number of titles is necessarily not too large, and the expense involved is slight in comparison with the results which would be obtained. After all, there are few books and journals useful in a study of the history of Michigan acquired in any one year by the libraries of this state. It should not be a formidable task to organize a contribution of cards to a central point, nor should the task of filing or the provision of catalog cases prove very costly. The work of answering inquiries could be done by postcard in most cases. I am quite sure that this is an enterprise which could be carried through and operated successfully to the great advantage of persons interested in the history of this state. Specialized and local lists of this sort have already proved of great value in various parts of the country. The most common is the union list of newspapers or journals currently re-

ceived. To my mind this type of list is far less valuable for an investigator than a list which gives the holdings of past years of the same periodicals and journals. It is easy to assume, in considering such a list, that current subscriptions can also be designated usually by a plus sign. To use a homely illustration, most libraries in this state or region take the *National geographic magazine*, but few of them possess the very rare early volumes in the set.

When a union catalog, either on a large or on a small scale, has been actually brought into being, there remain two or three rather interesting questions of the use of materials which are located through this catalog. I am inclined to believe that we have failed to realize the advantage which our English friends have in their proximity to London and Oxford. It would be far cheaper, I believe, for institutions engaging in research to arrange to pay the expenses involved in a personal visit to the library containing the greater part of the books needed by an investigator than to try to bring the books to him. It is rather fortunate, I feel, that neither the Burton books nor the Clements books can be sent on interlibrary loan. To say nothing of the question of their preservation and proper use, it is perfectly apparent that an investigator making use of a specialized library will almost immediately run onto numbers of other books germane to his inquiry whose titles he did not have when he made his inquiries as to holdings. By paying the expenses of an investigator to visit Washington, for example, in order to consult certain materials found in large quantities in the Library of Congress, the library should be spared the extraordinary expense of trying to duplicate many of these materials. The single field of documents of South American countries furnishes an example. The chances are that an investigator in Washington will have access to more of them than he can get in any other place in the United States unless he is interested in law, in which case he can get more at the Harvard Law School. Rather than attempt at the University of Michigan to gather against a possible and as yet unforeseen need for all of these South American documents, it would be far cheaper for the

library to spend two or three hundred dollars yearly in paying the expenses of an investigator to consult the materials in Washington. I do not know that I should care to administer such a travel fund, with the necessity of deciding between paying traveling expenses and buying books, but nonetheless I have little question as to the comparative costs involved.

It is much more probable, however, that the use of microfilm to make accurate copies quickly at a very small expense will operate to take the place of most visits and also to supplant most interlibrary loans. Only a few libraries have as yet procured the necessary apparatus, which consists of filming cameras, dark rooms, developing trays, drying racks, printing frames, etc. More libraries have bought the reading devices which are now coming on the market at reasonable prices. There is very little question that photographic copying, whether by photostat for short articles or by film for longer ones and for books, is going to be the solution to many of the difficulties involved in building up competent research materials in our libraries. I am not prepared to admit that all the claims of the advocates of film are necessarily valid, but I am sure that film has come to stay and that it will be developed in ways as yet undreamed of. I am somewhat fearful that films may take the place of the printed book to a much larger degree than we now think possible. It is entirely probable that the time will come when the printed materials which we now gather with such pains and expense will be in large part replaced by compact rolls of films, read in some type of projector as needed. It is utterly impossible, for example, for any library in the United States to get complete sets of all the journals and pamphlet-series and newspapers issued in France at the time of the French Revolution. The University of Chicago, however, has made films of the greater part of these and will soon be prepared to sell copies to libraries interested in original research in this field of perennial interest. Hitherto it has been necessary for scholars to visit Paris and the French provincial cities in order to cover this field successfully. I see no reason why we may not expect huge developments along this line in the next decade.

There is, however, one very definite difficulty involved in the use of film. This is the question of copyrighted material. Of course for older books and journals which are now in what the lawyers call the "public domain" this copyright question does not apply, but more recent books and journals, which have been copyrighted and on which the copyright is still valid, present an extremely difficult problem. No one wants to buy films of these books if he can buy originals or if he can have access to the originals. As yet this generation is much more accustomed to reading the printed word than to reading films in a projector. If the United States adopts the Bern Convention, practically all modern materials will fall into the domain of copyright and we shall have the very difficult question as to whether copying by photography and furnishing that copy to an investigator is really a violation of the letter, as well as the spirit, of the copyright law. When one recalls the rigidity with which copyright and royalty regulations have been applied to music, there is little hope for any considerable leniency in the matter of literary property, if once the lawyers and the courts are invoked. At present, however, the question is almost negligible because most of the film-copying which is being done is of older materials into which the question of copyright does not enter.

The more familiar method is interlibrary loan. The time has come for a restatement of the whole basis and practice of interlibrary loan. The Board on Resources is convinced of this and will issue within the next year or two very definite suggestions for the proper government and control of this practice. There is much abuse of the interlibrary loan privilege at the present time. The principles on which it operates are but imperfectly understood, and most of the large libraries find it necessary almost every day to explain to librarians of various small libraries why material which is wanted cannot be lent.

The next steps, which are easily foreseen in the integration of the resources of our American libraries, are fairly well defined. One of these is the increase and enlargement of regional agreements between major libraries as to their own share in

gathering certain types of materials. This is not likely to take the form of self-denying ordinances but is much more certain to develop along the line of magnifying and increasing an interest in certain fields in which good beginnings have been made. The agreement, for example, between the libraries of the universities of Minnesota and Michigan and the John Crerar and Newberry libraries in Chicago in the matter of European local academies is an instance in point. Minnesota has agreed to buy these for the Scandinavian and Baltic countries; the two Chicago libraries have agreed to specialize in the German local academies and societies; while the University of Michigan is buying largely the publications of French organizations of a similar sort. This agreement covers only general societies and academies and does not in any way include those more highly specialized organizations which concern themselves with a limited field. For example, one should not feel that Minnesota should refrain from buying a French botanical journal issued in a provincial town or that Michigan should refrain from buying a Swedish botanical journal. The agreement merely extends to those publications of a general character covering many fields of science, the field of history and archeology, whether general or local, etc. Even so, this agreement has made it possible to place at the disposal of scholars in the Great Lakes region thousands of volumes which could not have been rendered accessible if each library had gone on, irrespective of the others, trying to cover the entire field.

The second development is the creation of union catalogs in special fields. I believe that these will ultimately cover the resources of the whole United States and Canada. They might very well begin as local and regional union catalogs. They are certain to be very valuable as aids to investigation within their specialties. A union catalog, for example, of material on the history of canals could easily cover the holdings of all American libraries within a reasonable compass and when completed would doubtless lead by agreement to the development in certain localities of the materials for the history of this means of transportation. This sort of thing is accomplished with far more

ease and with far less expense than any general catalog, even of the single field of transportation, to say nothing of books in general.

The third development is almost certain to be a pooling of duplicates and provision for their exchange or sale on either a regional or a national basis. Few operations in libraries are at present conducted in a more haphazard fashion than the exchange of duplicates. This is a direction in which we require a good deal of thinking and planning, as well as the expenditure of a good deal of money, in order to arrive at a satisfactory solution to the problem of duplicates. The medical libraries have handled this particular matter with at least a fair measure of success and have set an example for others. Efforts along this line are likely to be inaugurated and carried to a successful conclusion in the next few years.

Finally, sound planning for the distribution of the materials of research on the basis of definite information as to holdings of the entire country is bound to come out of the actual necessities of our present predicament. Apparently all the big libraries of the United States have gone on the supposition that each one of them would develop into a British Museum or a Library of Congress. We have set no limits to our collecting, nor have we taken thought for the morrow. More particularly, when we have tried to specialize in certain fields we have done it without conferring with our neighbors. The result is that we have been competing for materials and have run prices up to extravagant heights. In this we have not been alone. Libraries the world over have been indulging in the same practice. In recent years American libraries have felt keenly the competition of the newer libraries in Japan and South Africa, in Australia, and in South America. The fact is we have been so eager to build up our libraries that we have not been willing to consider where we are coming out or whether we have been proceeding on a plan which can be continued indefinitely. There are not wanting signs that we have reached the time when co-operation in planning purchase must take the place of indiscriminate acquisition. On a small scale, of course, libraries have conferred

and agreed in many instances; but I have been amazed time and again to discover that materials likely to be employed only in the most recondite historical investigation have been bought by land-grant colleges in the idea that they should be immediately available for their scholars. Because certain modern journals of undoubted significance run back a century or more, institutions of severely practical aims have competed against one another, paying extravagant prices for the earlier issues of these same periodicals. This sort of thing cannot go on indefinitely, and in its place there is certainly indicated some voluntary and conscious effort at co-operation to secure the proper distribution of the materials of research throughout the vast extent of the American continent.

If this planning is once begun and is continued for a decade or more, the result will be that a scholar can discover where his materials are, how they can be procured, and what it will cost him to get them. He should no longer grope in darkness hoping to discover by writing hither and yon the books and journals which he needs; but he should be able, on the basis of a fairly complete national union catalog and of the results of planning for the regional distribution of materials, to secure precisely those books which he discovers he needs, and that without prolonged delay. To reach this end we require money, first for surveys of existing conditions and existing collections; then for the development of tools such as union catalogs; later for the development of plans for purchase. This will undoubtedly include subsidies for placing important books and series in given areas. And finally, we must look forward to the day when a quick answer may be given to any inquirer looking for any particular book, telling him where it is and providing him either with the book itself or with a copy in convenient form at a reasonable cost. To bring about this happy solution of the scholar's present difficulties is an aim which must needs arouse the interest, the enthusiasm, and the ingenuity of every American librarian.

THE INFLUENCE OF SLOPING SHELVES ON BOOK CIRCULATION

RALPH R. SHAW

TWO problems were considered in a study of use of shelving made at the Gary Public Library: (1) Does tilting of the lower shelves effect any change in the distribution of book selection over the seven shelves of a section? (2) Does tilting of lower shelves make it easier to find a particular title?

A series of tests extending more or less continuously over three months is reported herein as a contribution to the solution of these problems.

To determine the effect of tilting of shelves on the distribution of selection, several sections of shelving in the fiction-room were subjected to investigation. Conditions were varied, controls were set up, and so far as investigation in one library over a comparatively brief period can be taken as indicative of general conditions, rather interesting results or indications were obtained.

The method of determining the source of books circulated that has been used heretofore might be termed the "circulation-count method." By this method a section of the collection is selected for test, such as the 800's, or fiction, or some other class, and each day the cards for books circulated in that class during the day are checked against the shelves to determine from which shelves the books may have been taken. This method was considered too uncertain, because books taken from the stacks, from exhibit shelves, and special shelves—such as mystery stories, western stories, and the like—may incorrectly be credited to circulation from the regular array of wall shelving.

A method which might be termed the "shelf-count method" was developed. The sections selected for test were read before nine o'clock each morning and books were shifted so that there

were exactly twenty books on each of the seven shelves of the section. No books were shelved in the test sections during the day, and a count of the books remaining on each shelf at six o'clock showed fairly exactly the number of books that had been removed. For evening tests (6:00-9:00 P.M.) the same technique was used.

This method gives exact results in theory, but we know that some books are removed from the shelf and are replaced almost immediately, while others are picked up from one shelf and replaced on another. These shortcomings, of course, affect the circulation-count method in the same way that they do the shelf-count method, in that books replaced on shelves do not appear in the circulation records and cannot therefore contribute to a correct count of actual use of the shelves. One way in which this shortcoming may be overcome would be to assign someone to watch and to record actual use of the shelves. The added work and cost involved might or might not be justified by the increased accuracy of the results obtained. However, the shelf-count method gives certain indications which should be valid in their comparative results even though the actual quantitative findings fall short of perfection. It has the added advantage that it may be carried out entirely with pages, as part of their regular work, without materially affecting the normal operation of the library.

The tests were made in the central fiction-room. As a control, the shelves of one section were left straight, while the lower four shelves of the section adjoining were tilted. Then the following week the sections were reversed; the tilted section was returned to the horizontal position, the untilted one was tilted. Table 1 shows the findings for the series of day tests. The percentage of the total circulation for the section was computed for each shelf. Since perfectly equal distribution of selection over the seven shelves would mean that approximately 14 per cent of the books would come from each of the seven shelves, the deviation from the average is the difference between this theoretically perfect result and the actual percentage circulated from each shelf. The average deviation for the section is the sum of all the deviations

divided by the number of shelves, being seven in the case considered. The maximum deviation shows how far from the theoretical distribution the most or least used shelf actually falls. All figures are converted to the nearest whole number, since it seems pointless to carry out these strictly comparative results to fractions.

TABLE 1

DAY TEST: SHELVES OF ONE SECTION STRAIGHT, LOWER FOUR
SHELVES OF ADJOINING SECTION TILTED

TILTED				STRAIGHT		
Shelf Number*	Circulation	Per Cent of Total	Deviation from Average (Per Cent)	Circulation	Per Cent of Total	Deviation from Average (Per Cent)
1.....	22	17	3	18	14	0
2.....	16	12	2	29	23	9
3.....	22	17	3	18	14	0
4.....	22	17	3	28	22	8
5.....	14	11	3	16	13	1
6.....	17	13	1	13	10	4
7.....	17	13	1	5	4	10
Total...	130	100	16	127	100	32
Average deviation = 2 per cent Maximum deviation = 3 per cent				Average deviation = 5 per cent Maximum deviation = 10 per cent		

* Shelves are numbered from top to bottom.

From this it would appear that tilting the lower four shelves distributes use more evenly over the whole section. While tilting the shelves did not show any great increase in the total circulation from the section, it did, nevertheless, radically change the distribution of this circulation. With no material change in the collection under observation, since the totals include tests of both sections in both the tilted and the untilted state, this radical change in the distribution indicates that book selection in the fiction collection is random rather than purposeful. It is to be noted from Table 1 that the maximum deviation from the average was only 3 per cent with tilted shelves as compared with a

deviation of 10 per cent for the same shelves untilted, and the average deviation for all the shelves from the theoretically perfect distribution is approximately halved by tilting the shelves.

To check these findings further, the lower shelves of four other sections of shelving, which formed a single unit, were tilted and a shelf count kept for one week. The results of this test are shown in Table 2.

TABLE 2
DAY TEST OF FOUR SECTIONS, ALL WITH
LOWER SHELVES TILTED

Shelf Number	Circulation	Per Cent of Total	Deviation from Average
1.....	15	12	2
2.....	18	14	0
3.....	26	20	6
4.....	17	13	1
5.....	16	13	1
6.....	19	15	1
7.....	17	13	1
Total.....	128	100	12

Average deviation = 2 per cent

Maximum deviation = 6 per cent

Thus the average deviation proved to be about the same as that found above for tilted shelves. While the maximum deviation was larger than it was in the preceding experiment, it is still considerably smaller than that found for untilted shelves.

Another factor that seems to enter into consideration is the location of the shelves. With all the lower shelves in these four sections tilted, the circulation was highest in the section nearest the entrance and lowest in the section farthest from the entrance. Starting with the section nearest the door, the circulations for the four sections were 34, 33, 33, and 28 volumes, respectively.

Another two-week test showed that while a tilted section might circulate more books than the straight section when they were adjoining, the location of sections was more important

than straight or tilted shelves in determining total circulation. An untilted section at the entrance circulated 48 books during one week, while a tilted section 15 feet from the entrance circulated only 39. When these were reversed, the tilted section near the door circulated 50 books, while the new straight section 15 feet farther into the room circulated only 35 volumes. This seems to indicate that tilting is an accessory factor rather than a determinant, and that location of the books plays a

TABLE 3

NIGHT TEST WITH LOWER SHELVES TILTED UNDER LOW LIGHT INTENSITIES

TILTED				STRAIGHT		
Shelf Number	Circulation	Per Cent of Total	Deviation from Average (Per Cent)	Circulation	Per Cent of Total	Deviation from Average (Per Cent)
1.....	4	8	6	9	24	10
2.....	4	8	6	1	3	11
3.....	11	23	9	8	21	7
4.....	14	29	15	6	16	2
5.....	7	14	0	7	18	4
6.....	6	12	2	7	18	4
7.....	3	6	8	0	0	14
Total...	49	100	46	38	100	52
Average deviation = 7 per cent Maximum deviation = 15 per cent				Average deviation = 7 per cent Maximum deviation = 14 per cent		

more important part than does tilting in determining total circulation. It also is a further indication that book selection by the public in the fiction-room depends chiefly upon what people happen to see; that random searching for a book occurs far more frequently than does searching for a particular author or a specific title.

Since it appears that shelves are tilted chiefly to increase the ease with which titles on lower shelves may be read, it seemed advisable to make a shelf count under artificial illumination to determine whether tilting the lower shelves effected any change in distribution of book selection with relatively low light inten-

sities. A two-week shelf count gave the results shown in Table 3.

While this test shows more books circulated from the sections with tilted shelves than from the sections with untilted shelves, it also indicates that when the light intensity decreases tilting is definitely less important than lighting. In addition, however, it indicates that when the shelves were tilted the bottom shelf was used to a certain extent; whereas when the same shelves

TABLE 4
LIGHT-METER TEST OF SHELVES

DAY TEST			NIGHT TEST	
Shelf Number	Tilted	Straight	Tilted	Straight
	Foot-Candles		Foot-Candles	
1.....	10	10	3	3
2.....	12	12	2	2
3.....	13	13	2	2
4.....	16	12	2+	2
5.....	18	10	2+	1-
6.....	19	10	2+	1-
7.....	16	8	2+	1-

were not tilted the bottom shelves were entirely unused in the evening over a two-week period.

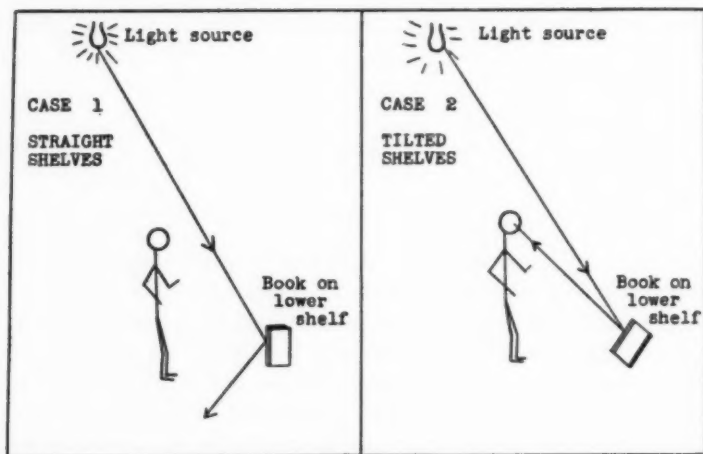
As seen in Table 3, the average deviation for tilted shelves is greater than it was found to be for untilted shelves under daylight conditions, and the evening distribution of selection, even with tilted shelves, is far from theoretical perfection; farther than the maximum deviation with straight shelves under daylight conditions.

This brings us to our second problem, which is one of optics and physiological optics.

A light-meter test of shelves under daylight and evening conditions, the results of which are given in Table 4, showed that not only does lighting affect the efficacy of tilting but that tilt-

ing of the lower shelves changes the intensity of effective illumination.

It is to be noted from the average readings in Table 4 that tilting the lower shelves doubled the amount of light reflected from the lower three shelves when artificial illumination was used, without any other change in the factors affecting the intensity of illumination. The evening tests are a better indication of the effect of tilting than are the daylight tests, because the amount and direction of light available is more stable when artificial light is used. Daylight readings change so rapidly with every passing cloud and with the time of day that the relative readings for straight and tilted shelves may be used only as an indication that tilted shelves do reflect more light to the reader than do straight shelves, without taking the numerical relationships as final and applicable under all conditions.



The increased reflection of light from tilted shelves is fully explicable by a rule of optics that the angle of incidence of light equals the angle of reflection. This is best illustrated by the simple diagram above.

It is obvious that in Case 1, with straight shelves, most of

the light that hits the book is reflected down toward the floor, and only a very small portion of it is reflected up toward the eyes of the reader. In Case 2, on the contrary, the great bulk of light is reflected directly to the eyes of the reader merely by changing the angle of incidence and thus the angle of reflection of the light.

Thus the more nearly perpendicular to the line of vision the book is placed, the greater the amount of light reflected to the eye from the book. In addition, there is the fact that we have been trained to read material best that is normal or perpendicular to the line of vision, and when an angle that the print makes with the line of vision becomes too great, it becomes impossible to read, regardless of the amount of illumination. This angle is probably in the neighborhood of 45 degrees, although this maximum varies for different individuals. Thus the more nearly normal to the line of vision the titles are placed, the more readily they can be read, and when the critical angle is exceeded, they cannot be read at all.

This would indicate that a person standing before a section of straight shelving would not be able to read titles on the bottom shelves readily without stooping, regardless of the intensity of illumination.

There are two ways by which the titles of books on the shelves may be made normal to the line of vision. In the method most generally used at the present time the books are shelved vertically and the borrower must shift his line of vision by bending, stooping, kneeling, or the like, so as to bring his eyes to a position at which the books on the shelf are approximately normal to the eye. The second method proposed is that of tilting the books so as to make their titles normal to the line of vision of a standing person. Then, since the amount of light reflected to the eye will be a maximum, according to the diagrams above, and since the angle of vision will be optimum, it should theoretically be possible to read all the titles on the shelves without bending or stooping. This appeared to be the result with tilted shelves during the day, but failed to be justified by the results obtained during the evening. Another simple law of physics

explains this difference. The intensity of illumination varies as the square of the distance. Thus if a person stands erect with his eyes fourteen inches from shelf 2, the distance between his eyes and shelf 7 will be more than four times as much as that between his eyes and shelf 2, and more than sixteen times as much light will be required on shelf 7 for equal visibility. There are three ways to solve this problem. One is to develop a complex lighting system which will deliver the proper amount of light on each shelf; a second is to expect the reader to bend slightly to make the distance from his eyes to all shelves the same, and a third would be to design shelving in a curve so that the eyes of a person standing erect in front of the shelving would be approximately equidistant from each of the shelves. With either the second or the third method a lighting intensity of two foot-candles should suffice to make the titles readable without great strain. (This is, of course, subject to debate, and even the best authorities agree that intensity of illumination required under any conditions is chiefly a matter of conjecture and opinion.) It is to be noted that during daylight hours the light intensity was so high that it was possible, without bending, to read the titles on the lower shelves when they were tilted so that the books were normal to the eye; while during the evening hours the level of artificial illumination was not high enough to permit that. In the evening, even though the light intensity was high enough so that slight bending would have made the lower shelves clearly visible, they were not used.

This seems to indicate that the third alternative, curved bookcases with tilted shelves, will be required if we are to obtain equalized use of all shelves under all conditions. However, another factor modifies this conclusion. Design of a section of shelving that would make all the shelves equidistant from the eye would require a curve extending about three feet out from the wall at the bottom of the section. The reader would then have to stand about three feet from shelf 2, and there would be no way for him to reach the upper four shelves.

This raises another question: How far from the shelves does the average reader stand? While this distance is modified by

the height of the borrower and the shelf that he or she is using, observation of a number of borrowers in the act of using the shelves indicated that they stand from about fourteen to twenty inches in front of the case, and that the determinant is reaching distance rather than seeing distance. That is, the borrower stands in such a position that he can readily reach books on the shelf on which his eyes rest.

Thus, the optical theory developed indicates that if books are to be equidistant from the eyes of a standing person it would be necessary for the reader to stand back about three feet; but the practical factor of reach precludes such a design.

Reaching distance affects the calculations in still another way. It is not possible for anyone to reach shelf 7 without bending. If we are to use all seven shelves we must assume bending at the waist to reach shelves 6 and 7. Since this bending is inevitable, because of the length of human arms and hands, we might as well assume that bending may be used to bring the eyes to within approximately the same distance of all the shelves. Because this is the case, tilting, in conjunction with the provision of evenly distributed light of as many foot-candles as we may be able to afford, will promote as even a distribution of selection over all the shelves as it is feasible to obtain.

It must be borne in mind, however, that when the books are tilted their titles are moved back from the position they formerly occupied relative to the shelf above, so that unless they are brought forward they cannot readily be seen. It is therefore necessary to compensate for tilt by moving the shelves forward somewhat to bring the titles to the approximate position they would have occupied if the books had not been tilted. This would require a stepped or curved construction of the lower half of the case. The maximum extension of the bottom of the case for this purpose would not exceed twelve or fourteen inches and thus would not interfere with normal standing and reaching distance in using any of the shelves. On the basis of the tests here recorded, some such design as this should represent about the optimum practical solution of this complex problem. Theoretical perfection of distribution of selection under all conditions

should not be expected unless we are willing to forego the use of shelves 6 and 7, and even then it is unlikely that perfection would be attained.

It must be pointed out, however, that during daylight hours, when there was more than enough light, very noticeable equalization of use was attained merely by tilting standard shelving and bringing shelf 7 forward four inches so that the titles were not hidden by shelf 6.

These limited tests indicate that tilted shelves are very helpful in making book titles more visible and in distributing selection over all seven shelves. They raise questions as to how far a library may go in providing adequate display of books so that all books will be used, and they indicate that the chief problem is one of tilting in combination with properly designed illumination. They raise some questions as to the importance of location of books as affecting casual book selection, and they indicate that casual selection predominates in the fiction-room.

Other extensive tests should be made to determine the relative importance of a number of other factors, including the threshold of vision with respect to both intensity of illumination and angle of vision, effect of color of bindings, freshness of bindings, glare due to shellacked surfaces, effect of contrasts between color of lettering and color of books, size of type to be used for optimum results, and the like. If from twenty-five to fifty libraries would co-operate in gathering more data on these points over a three-month period, data would be provided from which generally valid conclusions might be drawn.

THE EXCHANGE OF PUBLICATIONS AS A MEDIUM FOR THE DEVELOPMENT OF THE BOOK COLLECTION

IVANDER MACIVER

HOW should our exchange work be organized? Are exchanges a success from a financial standpoint? How shall we go about developing our book collection by exchange? These and similar queries have led the author to the conclusion that it may be worth while to outline a practical plan for the initiation and operation of exchanges—a plan which is capable of adaptation to fit the needs of individual organizations.

As Mr. Gable states in his recent book: "The term exchange is loosely used."¹ In attempting to give a definition one cannot confine one's self to serial literature, since publications of a monographic nature are also included in some transactions. One may not restrict the term to studies bearing the imprint of the organization negotiating the exchange, since many valuable separate works are sent out from such clearing houses as the national libraries of South America. Nor should the boundaries be limited to relations between institutions, for it is often possible to obtain an important periodical through the desire of the editor to secure a scientific series in return. Perhaps the best definition, as far as this paper is concerned, will be to include the exchange of all publications, exclusive of duplicates or fragmentary files no longer wanted by the original owner.

Librarians are rapidly becoming aware of the possibilities inherent in exchanges, but very little has been written upon the subject to date. In Cannons' *Bibliography of library economy*

¹ J. H. Gable, *Manual of serials work* (Chicago: American Library Association, 1937), p. 83.

... from 1876 to 1920² and the supplementary volumes³ that record the literature in our country through 1935, there is less than half a column of entries. This seems strange when one considers how large a sum of money is expended yearly in many institutions for the distribution of publications by exchange. Certainly administrative officers have a right to demand that the distribution be handled on an efficient, business-like basis. In the past this has not been the rule in many instances, but there are unmistakable signs that attempts will be made in the future to remedy such conditions.

At the outset, one important factor must be emphasized. All matters pertaining to the initiation and maintenance of exchanges should be centralized in an individual or department. In the University of California, the Division of Serials and Exchanges of the General Library at Berkeley is responsible for the initiation of exchanges on the various campuses, including the University of California at Los Angeles and the medical school in San Francisco. Unless there is a clearing house, considerable confusion may result. As soon as possible after the launching of the exchange work, the library should make an agreement with the administration and the manager of the press, if the institution issues its own publications, by which the powers and duties of the press and of the library, respectively, are clearly defined. In recent years, presses have begun to expand commercially and are, therefore, anxious to print publications which will sell in the open markets. It is usually upon monographs and periodicals that the manager of the press relies primarily in his efforts to meet the publishing houses on competitive terms. The plan now in force at the University of California has proved to be very satisfactory. Both monographs and "scientific series" (using "scientific" in its broadest sense) are published. The latter are available for exchange and purchase, but the former are reserved exclusively for sale.

² H. G. T. Cannons, *Bibliography of library economy . . . from 1876 to 1920* (Chicago: American Library Association, 1927).

³ Junior Members Round Table of the American Library Association, *Library literature, 1921-1932*, ed., L. M. Morsch (Chicago: American Library Association, 1934); *Library literature, 1933-35*, ed., Marian Shaw (New York: H. W. Wilson, 1936).

Once an understanding has been reached there should be strict adherence on both sides to the provisions, since a great deal of the success of the exchange work depends upon the existence of harmonious relations between the two divisions of the institution. Care must also be taken to acquaint the members of the faculty with the agreement so that they may not try to initiate exchanges without consulting the proper authority and may know to whom to turn when they desire to suggest publications they wish to have added to the collection.

Another factor may here be mentioned. The library should not have to pay from its book fund for the studies distributed by exchange. If a definite sum is earmarked each year by the librarian for the purchase of publications, the exchange work must be restricted in order to remain within the limits of the budget. If a definite amount is not laid aside, the librarian will find it difficult to balance his books at the end of the fiscal year. In some circumstances, a satisfactory arrangement may be reached whereby the manager of the press in his annual financial statement to the president specifies the sum expended for publications sent out on exchange. He thus accounts on paper for one of his largest items.

The library, on the other hand, should be ready at any time to submit facts and figures in order to convince the administrative officers that the returns in material received are commensurate with the outlay. After all, the modern college or university is a business institution as well as a house of learning and must be administered as such. Miss Elinor Hand, of the University of California Library, pointed out some time ago the need of accounting for allotted funds.⁴ Mr. Rider has discussed the whole question at length.⁵ He makes it very clear that the "basic principles of accounting" should apply to libraries as well as to other organizations. Exchanges form no exception to the rule. It will be wise, therefore, for any institution which is considering expansion in the exchange work or which is prepar-

⁴ "A cost survey in a university library," *Library journal*, LV (1930), 763-66.

⁵ Fremont Rider, "Library cost accounting," *Library quarterly*, VI (1936), 331-81.

ing to initiate such a project to keep this principle in mind and draw up a yearly report that the librarian may use if the occasion arises.

As the University of California Library did not have any satisfactory figures on file, the Division of Serials and Exchanges undertook in 1932 to make a detailed study of all publications received by exchange, with special emphasis laid upon their financial value.⁶ The survey has now been made a permanent part of the work, and a yearly report is prepared for the librarian.

The statement that exchanges ought to be centralized in a department is not meant to imply that they need to be isolated from other activities. In fact, it is wiser to link them with the periodical division, if one has been organized; otherwise, with the order department. Exchanges are vitally connected with serial work in general. Their acquisition includes many of the same problems that are faced in procuring titles by gift or purchase. Their handling upon receipt involves the same routine. Moreover, a constant watch must be kept over the individual exchanges, and this can be done satisfactorily only if the exchange assistants have control over the incoming publications. It should also be borne in mind that a balance must be maintained between the initiation of new exchanges and the ability of the serials staff to incorporate the returns.

How far should the faculty members be responsible for the development of the collection by exchange? Certainly they must be urged to participate in every way possible. All suggestions from them for additional material should be accepted without question, and they should be informed of the possibilities inherent in exchanges. Doubtful titles may be submitted to the scholar who is qualified to make a decision regarding the value of the material, if he is willing to give the library the benefit of his advice. Some will co-operate; others will not be at all interested or will feel too pressed for time. One learns to know the men and women upon whom one may count. The library,

⁶ Cf. "The open round table; year's study of exchange," *Library journal*, LIX (1934), 168-69.

however, should never be placed in a position where all exchanges must be submitted to a committee or to the scholars primarily concerned before any action may be taken. It should reserve the right to develop the collection without undue interference, since it forms the balance wheel. Future needs of the institution it serves must even be anticipated. For example, there may not be anyone interested in journalism today, but tomorrow a school of journalism may be established in view of the increasing interest in this subject. Today one might not be able to obtain any backing from the professors in developing the journalistic collection by exchange; tomorrow the library will be criticized if the publications available are not on the shelves. This is, after all, the same policy which must be adopted in securing a balanced collection by purchase. While the librarian is guided and assisted by the faculty in buying books and serials, he must ever be watchful lest the collection become unbalanced.

How may exchanges be sought most efficiently? There are, of course, various avenues of approach. Some of these are obvious; others become familiar only through experience. The procedure, moreover, varies in accordance with the extent of the publications to be offered in return, the amount of work that has already been done, and the size of the staff available.

Let us first consider a case where the collection is small and where the exchange work has just started. It is well, under these circumstances, to canvass the leading colleges, universities, academies, and societies of the world with a view to securing their serial publications in so far as they are available on exchange account.⁷ Whether one should try to collect everything from these institutions is a moot point. Even in as large an organization as the University of California there are two theories. Some of our best scholars believe that all studies bearing the imprint of an important institution ought to find a place on our shelves; others feel that we should be selective. One school of thought does not favor the acquisition of material in

⁷ It is hardly necessary to point out that *Minerva*, *Jahrbuch der gelehrten Welt*, is the Bible of the exchange staff.

languages which are not read at the present time by the university public; another considers it our duty to build for future generations.

When one has covered the general fields as thoroughly as possible with the publications at one's command, it is advisable to turn to special subjects and particular localities. Necessary limitations are imposed by the scope, quality, and quantity of the material to be offered. A lagging series or the failure of certain classifications to be represented in the output of one's institution often results in a corresponding deficiency in the book collection where funds are not adequate for purchase, and the library depends to an appreciable extent upon publications received by exchange. The University of California Library at Berkeley has a good basic serial collection in chemistry, but the majority of titles have had to be purchased because this particular field of knowledge has not been represented in our scientific series. We are able to secure publications only if the issuing body or individual is interested in studies along another line. The corresponding deficiency is shown in the priced exchange survey. According to the 1936 figures, only thirty-one titles are received by exchange as compared with one hundred and fifty in zoölogy, in which we issue an important series. By submitting such statistics to the department concerned or to the administrative officers, it is sometimes possible to awaken sufficient interest to repair the deficiency.

To keep abreast of the flood of new material that is constantly pouring forth from the presses of the world is a Herculean task. It is doubtful whether any organization is satisfied with the results of its endeavors. In any case, the exchange assistants need all the help available. Some of the important aids are listed below; others will occur to the reader.

1. *Suggestions emanating from the librarian and other staff members.*—More time should be allowed than is possible at present in most organizations for systematic bibliographical work as a basis not only for the initiation of new exchanges but also for the purchase of publications. We are not providing sufficient mental stimulus for the younger men and women of

our staffs. If a young woman has majored in botany, for example, time ought to be granted so that she may at least scan the leading journals in her field. She should then be made responsible for the suggestion of promising titles for exchange, gift, or purchase. We are constantly lamenting the fact that we do not have more specialists, and yet our staffs are so tied down with the administrative details incident to the successful running of a library that little energy and opportunity are left for specialization. Specialists on the staff ought also to be sought out for advice in connection with doubtful items.

2. *Recommendations of the faculty.*—These are often very valuable, but they are unfortunately too infrequent.

3. *Requests for exchange from other institutions or individuals, including visiting scholars.*

4. *Bibliographical tools consulted by the exchange staff.*—In the last analysis, the members of the exchange staff must bear the principal responsibility for developing the exchange collection. The general reviewing journals, such as the *London Times literary supplement*, must be consulted regularly, not to mention library publications, such as the *Publishers' weekly*, the *Bulletin of bibliography*, the *New York public library bulletin*, the *Wilson indexes*, and *Public affairs information service*. Magazines which feature bibliographies in special subjects, such as the *American economic review* and the *Engineering experiment station record*, should find their way to the desk of an exchange bibliographer upon their arrival in the library. All circulars and catalogs listing the individual series and monographs of the organizations concerned must be carefully checked against one's holdings. This is not only a valuable aid in discovering new publications, but it also assists in keeping up sets. Reports emanating from other libraries sometimes yield items to be added when they list important files that have been secured by exchange. Sample copies of new titles are, of course, a fruitful source, especially those coming from abroad.

5. *Bibliographies covering particular fields of knowledge or certain geographical areas.*—As has been pointed out before, it is wise to specialize after the groundwork has been laid. System-

atic checking of bibliographies is essential, but it is doubtful whether any library is altogether satisfied with the extent of its activities of this type. Again, the specialists on the staff should make available their superior knowledge of a specific classification. The results of their labors may also be used as a nucleus for the purchase of desirable items which are not obtainable by exchange. In fact, the exchange work should be tied up closely with the whole program for the development of the book collection. It is even concerned with documents, since many state and foreign publications are available if requested on exchange.

We turn now to the routine incidental to the successful organization of the exchange activities. Shall form and circular letters be used? In general, the University of California frowns on the use of forms as a policy for the negotiation of new exchanges. To be sure, stock phrases are bound to be repeated over and over again when the same person is responsible for all the correspondence, but an effort is made to inject a personal note based upon some knowledge of the publications which are desired. Form letters, however, are of assistance where language difficulties are involved. For example, one may wish to propose an exchange of publications with a provincial institution in a South American country where possibly English is not read. In such circumstances a circular letter in Spanish will probably receive more attention than a masterpiece in English. Personal appeals in a foreign tongue, written by members of the faculty and forwarded by the library with an accompanying statement, are often of material aid in establishing an *entente cordiale*.

In proposing an exchange, it is well to offer definite series in return whenever possible. Heavy mailing costs make it inadvisable to forward complete catalogs of the publications available, even if such a compilation has been printed. Moreover, these often go astray unless they are sent first class. The complete lists should be reserved for societies, academies, and educational institutions covering all fields of knowledge. For others, it is preferable to inclose one or more reprints of the individual series for the recipient's consideration, or a circular which merely designates the names of the various series.

As may be readily seen, such a procedure means that each new proposal must be scrutinized carefully. It is comparatively simple to secure an engineering publication if there is a similar series to suggest in return. The trouble arises when the desired study covers several subjects. As an illustration, let us assume that one is trying to secure a new periodical in general science and no sample is available. The bibliographer not only must cover the same ground as the checkers in the order department, but the material must be evaluated from reviews and circulars in order that an adequate offer may be made when the initial letter is written. It is at this juncture that one summons to one's aid all possible assistance in the shape of bibliographical tools.

Careful investigation is necessary when requests are received for additional publications on exchanges that have already been established. If the library is fortunate enough to be given a free hand in the distribution of publications, it is charged with a corresponding obligation not to be wasteful. In this connection two records have been of service to the Division of Serials and Exchanges at the University of California. As a result of the priced exchange survey, we now have a card index listing by title every serial received by exchange since the initiation of the survey in 1932. For each title the value of receipts for one year is recorded. Wherever possible, the actual price is given; otherwise, an estimate has been made. Since our exchange record card, to be shortly described, enumerates the titles of all serials credited to a particular exchange, it is a matter of only a few moments' work to secure an approximate value for the studies received. (Where unnumbered publications form part of the exchange, additional checking is necessary.)

For comparison with the incoming material, we keep a chart listing the various scientific series of the University and the list price of each for several years. By striking an average, a fair balance may be computed between credits and receipts. Although it is true that material obtained for the asking is not appreciated at its real value, too much stress should not be placed upon the financial consideration. The priced exchange

survey showed clearly that many factors must be taken into consideration in balancing an individual exchange. The financial basis is important, but the value of a certain journal for research must also be kept in mind. Again, there is the desirability of having the publications of one's institution in the leading centers of learning and the need of disseminating the results of faculty investigations. There may be courtesies due a scholar of note, or one may wish to assist a small organization which has

University of.....Library New York City, New York		ORIGIN: O. [our request] DATE: 3/1/34 LETTERS: O. 1/5/34; 2/1/34 T. [theirs] 1/20/34
SERIES SENT	VOL. OR DATE	
Botany	17	x Dropped 6/1/35
x Geography	5	o Added 7/1/37
Education	8	
Modern Philology	15	
o Zoology	41	
		Back nos. sent 3/1/34 6/1/35 7/1/37
UNIVERSITY OF CALIFORNIA LIBRARY: EXCHANGE INDEX		

FIG. 1

promise for the future. It is not possible to be bound by iron-clad rules.

Where the press or a central mailing division handles the actual shipping of the publications, orders may be sent to that agency on regular blanks provided for the purpose. The information given should include the date, the address to which the material is to be sent, and the series, or parts of series, or monographs that the library wishes forwarded. A letter bearing the same date should be sent to the addressee listing the extent of the shipment. If the material is to be routed via the Smithsonian Institution, this ought to be so stated in order to explain the delay in receipt.

The exchange record, already mentioned in connection with the procedure, is a very important part of the machinery. Since it is consulted constantly in any live organization, the most satisfactory form is, perhaps, a card index. The sample card represented in Figure 1 shows the form used by the Division of Serials and Exchanges at Berkeley in listing exchanges sent to a particular library; Figure 2 represents the other side of the card on which are entered the exchanges received from that library.

SERIES RECEIVED	VOL.	DATE	
Abstracts of theses	1	1933/34	x Includes monographs
Dissertations			
Journal of science	3	1934	° Ceased pub. with v. 6, 1936
x Miscellaneous puba.			
° Publication: Studies in anthropology	4	1934	
^ Publication: Studies in education	1	1936	^ Added 1936

E6—1m-7, '34

Fig. 2

In any form that may be evolved to fit the needs of a particular institution, it is important to record the salient details such as the date when the exchange was consummated, the correct address, the series and back volumes supplied, and the publications received in return. Data regarding current receipts and current output will be shown on the periodical cards and mailing-division reports, respectively.

A chronological chart should also be maintained, listing each new exchange and each "drop," so that one may be in a position at any time to submit the net total of the number of exchanges carried by the institution.

Nothing has been said of the possibilities of developing the collections of various divisions of an institution by negotiations emanating from the central authority. This is a story in itself. Recent experience at the University of California has proved conclusively that a great deal may be accomplished if there is close co-operation. The library of the University at Los Angeles has benefited, for example, to the extent of several thousand publications in the last few years.

An attempt has been made in this paper to set forth the principles to be followed, the objectives to be sought, and the results that may be obtained from an active participation in the development of the book collection by means of exchanges. Conditions vary in every institution. In one there may be only a handful of publications to offer; in another there will be many. One library, perhaps, has done nothing with exchanges to date but is eager to begin. Another is conducting the work successfully yet feels that more might be accomplished. For all there are possibilities ahead. The opportunities are many; the challenge to one's initiative, ingenuity, and imagination is never ending. Therein lies the fascination.

NONMEDICAL JOURNALS FOR THE CLINICAL LIBRARY

JUDITH WALLEN HUNT

SELECTION of a subscription list in any field of knowledge is difficult. Mass opinion, rather than individual opinion, is generally more valuable in making a choice, particularly in the case of the small library with a limited budget. Recommendations are subject to personal bias, and no one is qualified to say which are the best journals in a given field. A relatively obscure publication may bring forth an article of great significance, as illustrated by the classic example of the *Verhandlungen des Naturforschenden Verein in Brunn*, which in 1865 published Mendel's now famous "Versuche über Pflanzen-Hybriden." But while it is impossible to ascertain the intrinsic value of a periodical, it is possible to determine its value in terms of use. The aim of this study is to find which are the non-medical journals most used in a clinical library.

To determine the importance of journals in terms of use, two methods have been employed. Jenkins,¹ Sherwood,² Gregory,³ and others have measured the importance of medical journals deductively by the summation of references culled from key journals. Davis⁴ and the author⁵ have determined the importance of journals directly by the summation of circulation data for the library studied. Both methods have their advantages and disadvantages.

¹ R. L. Jenkins, "Periodicals for medical libraries," *Journal of the American Medical Association*, XCVII (1931), 608-10.

² K. K. Sherwood, "Relative value of medical magazines," *Northwest medicine*, XXXI (1932), 273-76.

³ J. Gregory, "An evaluation of medical periodicals," *Bulletin of the Medical Library Association*, XXV (1937), 172-88.

⁴ E. H. Davis, "Use of periodicals at Long Beach public library," *Wilson bulletin*, XI (1937), 397-98.

⁵ J. W. Hunt, "Periodicals for the small bio-medical and clinical library," *Library quarterly*, VII (1937), 121-40.

The deductive method is based on group judgment from a large area, which is an obvious advantage. But though the group studied is widely distributed, its constituent members are not clearly defined. It is hard to know whether or not such a study reflects primarily the needs of the research worker, of the clinician, or of both. Further, it is not always accurate to assume that all literature references cited have been actually consulted. Also, results will depend on the key journals used. If the *Klinische Wochenschrift*, for example, is one among three key journals selected, the results of such a deductive study cannot be generalized to apply properly to the small American clinical library. A list prepared from only three key journals, one of which is written in a foreign language, will include more foreign periodicals than will assure maximum utility of available funds. Subscription prices to German periodicals are still so high that the inclusion of ten or more in a small subscription list would absorb a large percentage of the periodical budget.

When the importance of periodicals in terms of use is based on circulation data, the community studied is definitely circumscribed. Therefore, the results in their totality can be logically generalized so as to apply only to similar communities. Results will depend on the subscription list of the library studied. Unless it is comprehensive, summation of circulation data will have little value. Temporary reader interest will also modify the results if tabulations cover only a short period. But in spite of possible errors, either method of selection is preferable to individual judgment, which may be warped by special interest in one field or by lack of familiarity with another. Any subscription list, by whatever method derived, should be considered merely as a guide and should be modified to fit local conditions and to conform to the needs of the readers to be served.

Data for the present study were collected from the periodical circulation of the Frank Billings Medical Library. During an entire year home-use circulation of journals was tabulated and was cumulated at the end of the period. The community served is composite, consisting of research workers, clinicians, and medical students. As the Bio-Medical Libraries subscribe to

about nine hundred journals, it may be taken for granted that the most important periodical literature was at hand. Daily messenger service made all nonmedical journals readily available to the clinical library. With these facts in mind the list of nonmedical journals presented in Table 1 may be appraised more critically. Periodicals are arranged in order of declining importance in terms of use.

The fifty nonmedical journals most used by readers of the Frank Billings Medical Library reflect the needs of the research worker. Eighteen journals listed in Table 1 deal with physiology or biochemistry. It is interesting to note that, with three exceptions, all these periodicals are indexed in the *Quarterly cumulative index medicus*. The exceptions are: *Annual review of biochemistry*, *Naturwissenschaften*, and *American naturalist*. For the small clinical library whose readers are not doing research, the list presented is obviously too comprehensive. But even the small library should have representation in general science, biology, anatomy, bacteriology, biochemistry, immunology, and physiology. From Table 1 can be selected a list of journals which will give adequate representation in the various fields. A recommended list of nonmedical periodicals for the small clinical library is given in Table 2.

Because Table 1 shows that physiology and biochemistry are the two border sciences which the clinician consults most frequently, these subjects have been stressed in the list in Table 2. It will be noticed that the most-used journals in a given field have not always been selected. In Table 2, for example, it would not be practical to include foreign journals, because the language handicap would materially restrict their use. The *Annual review of biochemistry* has been given precedence over three other journals in the same field, first, because it is written in English, and, second, because it is a review journal. It calls attention briefly and critically to the work of from one thousand to two thousand investigators and includes extensive bibliographies. An ordinary journal in the same field would cover in greater detail the work of from fifty to one hundred workers, and the appended literature references would be generally far less exten-

TABLE 1

LIST OF RANKING NONMEDICAL JOURNALS ARRANGED IN
ORDER OF DECLINING IMPORTANCE

- | | |
|--|--|
| 1. <i>American journal of physiology</i> | 26. <i>Annales de l'Institut Pasteur</i>
(Paris) |
| 2. <i>Journal of biological chemistry</i> | 27. <i>Journal of biochemistry</i> |
| 3. <i>Physiological reviews</i> | 28. <i>Journal of bacteriology*</i> |
| 4. <i>Journal of physiology</i> | 29. <i>Philosophical transactions of the</i>
<i>Royal Society of London, Ser. B</i> |
| 5. <i>Journal of immunology</i> | 30. <i>Anatomischer Anzeiger</i> |
| 6. <i>Hoppe-Seyler's Zeitschrift für</i>
<i>physiologische Chemie</i> | 31. <i>Naturwissenschaften</i> |
| 7. <i>Biochemical journal</i> | 32. <i>Skandinavisches Archiv für Physi-</i>
<i>ologie</i> |
| 8. <i>Comptes rendus ... Société de bi-</i>
<i>ologie</i> | 33. <i>Chemical reviews</i> |
| 9. <i>Biochemische Zeitschrift</i> | 34. <i>Parasitology</i> |
| 10. <i>Science</i> | 35. <i>Archiv für Entwicklungsmechanik</i>
<i>der Organismen</i> |
| 11. <i>Pflüger's Archiv für die gesamte</i>
<i>Physiologie</i> | 36. <i>Journal of industrial hygiene. . .</i> |
| 12. <i>Zentralblatt für Bakteriologie,</i>
<i>Parasitenkunde und Infektions-</i>
<i>krankheiten</i> (Abteilung 1, Origina- | 37. <i>Protoplasma</i> |
| <i>le).</i> | 38. <i>Zeitschrift für Anatomie und Ent-</i>
<i>wicklungsgeschichte</i> |
| 13. <i>American journal of anatomy</i> | 39. <i>Comptes rendus ... Académie des</i>
<i>Sciences</i> |
| 14. <i>Proceedings of the Royal Society,</i>
<i>Ser. B</i> (London) | 40. <i>Proceedings and transactions of</i>
<i>the Royal Society of Canada</i> |
| 15. <i>Annual review of biochemistry</i> | 41. <i>Journal of experimental zoölogy</i> |
| 16. <i>Proceedings of the National Acad-</i>
<i>emy of Sciences</i> | 42. <i>American naturalist</i> |
| 17. <i>Zeitschrift für Immunitätsfor-</i>
<i>schung</i> | 43. <i>Journal of general physiology</i> |
| 18. <i>Anatomical record</i> | 44. <i>Quarterly review of biology</i> |
| 19. <i>Journal of nutrition</i> | 45. <i>Bulletin de la Société de chimie</i>
<i>biologique</i> |
| 20. <i>Quarterly journal of experimental</i>
<i>physiology</i> | 46. <i>Journal of metabolic research</i> |
| 21. <i>Journal of anatomy</i> | 47. <i>Human biology</i> |
| 22. <i>Zeitschrift für Biologie</i> | 48. <i>Annals of the Pickett-Thomson</i>
<i>Research Laboratory</i> |
| 23. <i>Journal für Psychologie und Neu-</i>
<i>rologie</i> | 49. <i>Zeitschrift für Zellforschung und</i>
<i>mikroskopische Anatomie</i> |
| 24. <i>Ergebnisse der Physiologie</i> | 50. <i>Fermentforschung</i> |
| 25. <i>Nature</i> | |

* Beginning December, 1937, *Bacteriological reviews* is delivered free to subscribers to the *Journal of bacteriology*.

sive. Although Table 1 shows that the *American journal of anatomy* is the most frequently used anatomical journal in a large clinic, the periodical in this field next in line was chosen instead. *Anatomical record* was selected because it makes available the program of the American Society of Zoölogists, together with abstracts of the two hundred or more papers presented. It gives over one hundred abstracts of papers to be presented at the annual session of the American Association of Anatomists and abstracts of papers presented by the American members at the International Congress of Anatomists. Book notices and reviews are likewise included. Among general biological journals, the *Quarterly review of biology* comes fourth in

TABLE 2

A RECOMMENDED LIST OF NONMEDICAL PERIODICALS FOR
THE SMALL CLINICAL LIBRARY

- | | |
|---|--|
| 1. <i>American journal of physiology</i> | 6. <i>Science</i> |
| 2. <i>Journal of biological chemistry</i> | 7. <i>Anatomical record</i> |
| 3. <i>Physiological reviews</i> | 8. <i>Journal of bacteriology</i> |
| 4. <i>Annual review of biochemistry</i> | 9. <i>Journal of nutrition</i> |
| 5. <i>Journal of immunology</i> | 10. <i>Quarterly review of biology</i> |

Table 1; yet it has been given preference in Table 2. It takes precedence over the *Comptes rendus ... de la Société de biologie* and the *Zeitschrift für Biologie* because of the language handicap of these two journals. It takes precedence over the *Proceedings of the Royal Society*, Ser. B (London), because it is a review journal and as such covers the subject better. One other important feature of the *Quarterly review of biology* is the section headed "New biological books." In the course of a year over five hundred books are reviewed critically. In most instances the reviews are short, giving brief indications of the content and character of the volume. Longer reviews are published for books of special significance.

While the titles in Table 2 provide good representation of nonmedical journals for a small clinical library, the table should be considered only as a guide. The presence of several members of the clinical staff who read French and German fluently may

make the inclusion of one or more foreign journals advisable. Or local conditions may dictate a subscription to *Parasitology* or to the *Journal of industrial hygiene*. The librarian should

TABLE 3

LIST OF BIOLOGICAL ABSTRACT JOURNALS

General Biology:

1. *L'Année biologique*
2. *Berichte über die wissenschaftliche Biologie*
3. *Biological abstracts*
4. *Resumptio genetica*
5. *Wistar Institute bibliographic service*

Anatomy:

1. *Anatomischer Bericht*

Bacteriology, Parasitology, and Hygiene:

1. *Bulletin de l'Institut Pasteur* (Paris)
2. *Bulletin of hygiene*
3. *Helminthological abstracts*
4. *Tropical diseases bulletin*
5. *Veterinary bulletin*
6. *Zentralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten* (Erste Abt.: Referate)
7. *Zentralblatt für die gesamte Hygiene*

Biochemistry and Physiology:

1. *Berichte über die gesamte Physiologie und experimentelle Pharmakologie*
2. *British chemical and physiological abstracts. A., III—Physiology & biochemistry*
3. *Bulletin de la Société chimique de France*, Section: Documentation
4. *Chemical abstracts*
5. *Chemisches Zentralblatt*
6. *Nutrition abstracts and reviews*

carefully record requests for journals not available in the library. When transportation charges for interlibrary loans approach the subscription price, the journal should be included in next year's subscription list.

Because a review journal is highly selective and appraises critically, whereas an abstract journal only summarizes briefly,

the former is recommended for the small clinical library. However, as a bibliographical tool the value of an abstract journal cannot be overestimated. It covers the literature in its chosen field more completely than does the review journal. As abstract journals are not permitted to circulate, it has been impossible to gather data concerning their use. But as their importance dictates their inclusion in this study, a list has been appended in Table 3. Under subject headings, biological abstract journals currently published have been arranged alphabetically.

For the small library, subscription to *Biological abstracts* is recommended. Second choice would be *British chemical and physiological abstracts. A., III—Physiology & biochemistry.*

THE DURABILITY OF PAPER

GÜNTHER REICHARDT

GENERALLY speaking, the decline in quality of paper can be attributed to the following factors: (1) increasing use of paper, which has lowered standards; (2) the fact that the public is not educated to demand better-grade paper; (3) production of paper by machine; and (4) low prices, which necessitate the use of cheaper materials. Basically, however, the reasons for this decline are: (1) damage to the fibers in the process of machine work; (2) use of minerals, especially the filler; (3) excessive bleaching, particularly by means of calcium hypochlorite; (4) use of alum; and (5) discovery of mechanical wood pulp by Friedrich Gottlob Keller in 1845.

In the period of transition from handmade to machine-made paper, the problem of upholding the high standards for paper-making arose. The resultant loss of quality in the properties of paper, especially that used in newspapers, called for a united effort on the part of those concerned over this decline.

This effort may be traced from the beginnings made by Ernst Hartig and Fritz Hoyer in 1881 and the foundation in 1884 of a division for paper-testing in the present-day Materialprüfungsamt (Institute for the Testing of Materials), Berlin-Dahlem, to the year 1886, when Martens succeeded in establishing the first standards for printing-paper. These standards led to the extended science of paper-making as recorded in the work of Wilhelm Herzberg, *Papierprüfung*. The question of paper-testing was studied by Delisle in France, Franz Ehrle in Italy, the Library Association¹ and H. M. Stationery Office in England, the Committee on the Deterioration of Paper in the Department of Agriculture in the United States, and, finally, it

¹ Norman Pavley in Oxford at the Conference of the Association of Special Library and Information Bureaus: "Every book and paper since 1870 is open to suspicion" (see "The durability of paper," Report of the Special Committee set up by the Library Association [London, 1930], p. 7).

was taken up by the International Institute of Intellectual Cooperation of the League of Nations (1928), with the view of establishing one standard for each class of material and of raising the quality of all types of paper.

In this connection it may be stated that not all properties examined by the paper-testing associations have the same importance for the library. Although the aesthetic consideration is not to be underrated, the primary demand of the library is still for paper of durability. Obviously, some copies of newspapers should be printed on durable paper, since they gain steadily in significance for the study of history, for local historical research, and for genealogical purposes. The Magdeburg, Frankfurt, and Cologne newspapers—Cologne *Volkszeitung*, in particular—have recognized this fact for some time and have published a small edition of annual volumes on durable paper. In other countries, the practice of printing a part of each issue on durable paper has been followed by the London *Times* since July 2, 1917, the *New York times* since the beginning of 1926, and the *Sydney morning herald* since January 2, 1926.

In Italy librarians demand above all else the restoration of all the extant papers in the files of the privately published newspapers, especially of *Il Popolo d'Italia*, and second: (a) several library copies made from handmade paper and (b) newspaper reproduction reduced to 20 × 27 cm. by means of photolithography and "offset" printing.²

Johannes Franke³ has raised similar demands in Germany for the files of the most important newspapers. When one finds, according to the census of periodicals taken in 1933, that the *Völkischen Beobachter* files for the years 1920–22 in the Library of the Bayrischer Landtag and the annual volumes for the years 1923–24 in two Bavarian institutes⁴ constitute the only extant copies of this newspaper, the problem calls for attention. A new

² "La Costituzione del Comitato per i restauri: il terzo congresso dell'Ass. Ital. per le Biblioteche," *Accademie e Biblioteche d'Italia*, VIII (1934), 552–53.

³ Johannes Franke, "Eine ernste Gefahr für unsere Bibliotheken," *Zentralblatt für Bibliothekswesen*, XXV (1908), 200–206.

⁴ Bayrischer Landtag, Munich; and Stadtrat, Munich.

edition on better paper and a suitable preservation of these few newspaper copies must be accomplished if future generations are to be able to study present-day Germany from contemporary publications.

The life-span of paper depends first, of course, upon the use to which it is put. Aside from this factor the durability is determined by resistance, for paper must withstand chemical and physical influences such as air, light, heat, dampness, etc. This resistance depends upon the durability of the processed fiber employed, which is the first consideration in all investigations. The basic material is decisive in the attainment of durability.

This knowledge, that all the richness in the quality of paper is determined by the various raw stuffs used, has been gained through analysis, experimentation, and experience. The investigator's study was further enlightened by a scrutiny of the kind of filler used between the fibers and of the sizing material used. It was believed that the effect of the minerals used in making the paper smooth, light, white, glossy, and opaque was detrimental and weakened the resistance of paper. For this reason, the first paper standards in 1886 established the maximum ash content at 2 per cent for Class I (rag paper), 5 per cent for Class II (75 per cent rag and 25 per cent pulp paper), and 15 per cent for Class III (papers made from any material, excluding wood pulp). These restrictions were incorporated in the provisions of 1891. It was not understood, however, why the filler should affect durability unfavorably, when it surpassed the purest plant fiber in resistance to atmospheric and other chemical influences. The provisions of 1904, therefore, allowed the manufacturers a free hand in the use of mineral filler. This availed the paper-maker little, since the presence of a larger quantity of mineral filler in the processing reduced the firmness in the very classes, I and II, for which the highest durability had been prescribed. In any event, the issue in regard to fillers is decided not only by aesthetic considerations but primarily by the fact that a paper with filler "can be more highly valued qualitative-

ly, since its production is possible only through the use of better raw stuffs and better processing."⁵

The sizing substances in paper are always a constituent of higher sensitivity than cellulose. Starch and animal sizing decompose when exposed to dampness and are attacked by micro-organisms. Rosin, although resistant to parasites, is destroyed by oxidation under the influence of light. Paul Klemm⁶ recommends animal sizing and starch which are closely related to the fiber substances of carbohydrate. Through the addition of formaldehyde, the sensitivity should be reduced. The use of formaldehyde decreases the degree to which starch and animal sizing will absorb moisture.

The U.S. National Bureau of Standards⁷ established through artificial aging experiments the fact that paper with less rosin content was more resistant, whereupon one may conclude that rosin sizing is injurious. For this reason, the Italians require animal sizing for high-grade paper.⁸ The instability of paper produced after 1830 was traced back through experiments to the use of rosin soap in the bleaching of the rags and linen used in the paper.⁹

Recently, the Chemical Society in Stockholm has done some special research on this question. Contrary to the current opinion that paper treated with rosin sizing is inferior to that treated with animal sizing, the Swedish union of paper and cellulose chemical engineers delivered the opinion that paper which is doubly treated with rosin sizing is as stable as that

⁵ Wilhelm Herzberg, *Papierprüfung* (7th ed., 1932), p. 285; Italian experts, represented by Testi, turn principally to filler. As an example, Testi points to the bad paper of the Accademie e Biblioteche d'Italia, which, with a wood-pulp content of 10-15 per cent, leaves 20 per cent parts of ashes. See also G. Testi, "A proposito di malattie dei libri," *Accademie e Biblioteche d'Italia*, IV (1930-31), 216.

⁶ "Dauerhaftigkeit von Papier," *Wochenblatt für Papierfabrikation*, 1932, p. 626.

⁷ B. W. Scribner, "Bureau of Standards studies on the deterioration of paper." Reprinted from *Pacific pulp and paper industry*, IV (1930), 30-34.

⁸ Testi, *loc. cit.*

⁹ H. U. Kiely, "Permanency of paper," *World's paper trade review*, XCVIII, 1230; J. E. Minor, "Paper permanency as related to sizing and acidity," *Paper industry* (March, 1932), p. 1421.

treated with animal sizing.¹⁰ Here the deciding factor for durability is better processing. Further, the use of Montanwax for sizing has increased.

Pulp can suffer a loss of resistance early in the manufacturing process through excessive pressure and mechanical damage. The physical condition of the surface and transverse fibers as well as the first signs of physical injury can be detected by microphotography. Because of this, imperfections and gradual decomposition within the paper itself can result, so that the deterioration is begun even before the paper is marketed. Thus, the calcium hypochlorite, together with the alum used in sizing, liberate hydrochloric acid, which deteriorates the cellulose. Other acids may be liberated, although in smaller quantities. This acid is detected by testing with litmus or Congo red paper and is best combated through neutralization with ammonia. The crystals of "antichlor," which are used in achieving a white paper, operate prejudicially when paper is stored away. Salts and acid salts of iron can cause numerous flecks, which will appear on the paper after several years.¹¹ The Italian research workers believe that the chestnut-brown color of seventeenth- and eighteenth-century German publications can be traced back to the presence of iron.¹² It is conjectured that the paper mills producing such paper were situated by water with a high iron content. Testi recommends a very difficult and problematic method of restoration by means of potassium permanganate and sulphuric acid.

Herzberg¹³ classifies the most frequently encountered imperfections into three groups. The discovery of the different single causes often offers great difficulties. For that reason it is not easy to avoid blemishes, although the paper may be produced with the greatest care, and in ordinary paper many flaws can

¹⁰ "Bedeutung der Leimung für die Haltbarkeit des Papiers," *Papierzeitung*, 1919, p. 1036, from *Svensk Pappers-Tidning*.

¹¹ Alfonso Gallo, "Il restauro dei manusc. e dei documenti antichi," *Accademie e Biblioteche d'Italia*, I (1927-28), 79.

¹² G. Testi, "Nuovi esperimenti sul restauro delle carte imbrunite," *op. cit.*, pp. 388-93.

¹³ *Op. cit.*, pp. 203-4.

often be discerned. By isolating the constituents in the imperfections one is able to reach a conclusion as to the basic causes. Bronze spots, which usually appear long after the manufacture, are caused by the Hollander and by the valves or pipes of the sulphite boiler used in treating the materials. Rosin flaws may come from the wood pulp. Rosin is a frequent source of blemishes. It is found with fat substances, and the two are always present in wood and other cellulose materials. In the process of smoothing paper, sand or quartz flecks may form through the crushing of sand granules. The crushed particles form white spots from which streaks radiate, making further defacements. Rudolf Korn¹⁴ describes the flaws caused by the silicified, sclerenchymatic cells of straw cellulose. Gypsum, starch, glue, iron and iron compounds, manganese, and chloride of lime create many and varied flaws. Green markings can be produced by insufficient filtration of the surface water, which brings the paper into contact with the tissue of water plants.

Even paper made of the best materials can, under certain circumstances, be subject to decomposition. Examples of this can be found in libraries where the books are given every chance to last for centuries through the best kind of care and storage. In spite of this, they last only a relatively short time because of the hard usage given them.

In the year 1904, the Institute for the Testing of Materials, Berlin-Dahlem, undertook a series of durability experiments in order to formulate a certain and conclusive opinion as to the qualities which determine the stability and, therefore, the life of paper. Unfortunately, these experiments could not be carried to a conclusion, owing to the insufficient number of specimens supplied by the paper industry. Thus far, numerous tests have proved that the stability has decreased approximately 5 per cent over a period of from twelve to fifteen years, and the tensile strength has decreased 10-12 per cent in that time.¹⁵ The dif-

¹⁴ "Sklerenchymflecke in Papier," *Papierzeitung*, 1927, p. 237; *Wochenblatt für Papierfabrikation*, 1927, p. 714; *Papierfabrikant*, 1927, p. 411.

¹⁵ Franke, *op. cit.*, pp. 193-206; Wilhelm Herzberg, "Dauerversuche mit Papieren von verschiedenen Stoffzusammensetzungen," *Mitt.* (1907) Book 2, pp. 82-99; *ibid.* (1911), pp. 169-83.

ference between pure rag and pulp paper is a less decisive factor. Although it is impossible to obtain conclusive results as to the difference in the durability of the papers of the three classes of materials because of the short space of time (twelve to fifteen years) in which they were tested, still, the experiments tend to confirm the fact that our present-day pulp paper is not inferior in firmness to rag paper.

The Swedish Institute for Testing of Materials reached similar conclusions.¹⁶ It tested the folding endurance of the paper and established the loss in folding endurance at 60 per cent, the tear resistance at 5 per cent, and the loss in elongation rupture at 10 per cent for all classes of paper.

The U.S. National Bureau of Standards' investigators¹⁷ tested durability and resistance by examining paper before and after it was subjected to heat. After seventy-two hours at a temperature of 100° C. the loss in resistance to folding was found to be a mean of 39 per cent in thirteen rag papers treated with sizing, a mean of 40 per cent in three papers made of purified wood pulp, and a mean of 93 per cent in eight papers made of sulphite pulp. The "folding loss" was, therefore, fairly equal in rag and good wood pulp papers, while that of sulphite pulp papers was considerably more. This whole series of experiments indicates that rag and pulp papers may react in much the same manner, although it has not yet been proved that artificial and natural aging lead to the same results and that what is true in the laboratory is true in practice. Many research workers of the present day have looked for a basis for durability in the chemical purity of the fibers used and in the degree of acidity. The purity of fiber materials is measured, in general, by the content of alpha-cellulose, which should be the highest possible, and by the copper number, which should be the lowest possible. Therefore, the nonalpha-cellulose constituents must be considered together. Undoubtedly, lignin, oxide, and hydrocellulose are in-

¹⁶ *Svensk Pappers Tidning*, 1925, Nos. 10, 11, 12; G. Hall, "Permanence of paper," *Paper trade journal*, LXXXII (1926), 52-58; Technical Association of the pulp and paper industry, *Papers*, IX (1926), 90-98.

¹⁷ Scribner, *op. cit.*

jurious. An exception to this, according to the research of Rasch,¹⁸ is that pentosans should have no deleterious effect upon cellulose. The exception, that pectin substance reacts in a similar manner, is strongly supported by the fact that all old paper of our forebears' time has endured up to the present in spite of the high content of pectin. Since linen rag was used exclusively, the paper contained about 20-25 per cent pectin. The pectin is contained in flax bleached in the sun, a method which effected much less bleaching than that of chemical processing. W. V. Torrey and E. Sutermeister¹⁹ oppose this opinion and point to the low alpha-cellulose value of good Chinese and old European paper. Since the alpha-cellulose is altered very little by age, the fiber material must, therefore, have possessed a low alpha-cellulose content to begin with, which leads us to conclude that the durability was determined by the chemical qualities of the entire paper rather than by only the chemical qualities of the fiber material.

As to the acidity, it is known that a high degree of acid leads to the formation of hydrocellulose and consequently to the destruction of the paper. The presence of a small acid residue, as it persists through the excessive use of alum in the process of treating the paper with rosin sizing, is, however, not likely to be important. Paul Klemm²⁰ in his experiments detected a damage to paper when subjected to dampness, through the disassociation of resinate aluminum if contained in large quantities. This resinate aluminum is an important tool of industry in processing. Paul Klemm's findings are supported by the fact that hydrochloric acid acts considerably stronger than either sulphuric acid or aluminum sulphide at the same pH.

The injurious action of acidity is evident in a comparison of soda pulp with sulphite pulp. Both papers, with a folding resistance up to 2,000, were heated to 100° C. While the soda

¹⁸ R. H. Rasch, "Accelerated aging test for paper," *Bureau of Standards journal of research*, VII (1931), 465-75. Quoted from Bruno Schulze, *Wochenblatt für Papierfabrikation*, 1932, pp. 225-26.

¹⁹ "A brief study of some old paper," *Paper trade journal*, XCVI (1933), 45-46.

²⁰ *Op. cit.*

pulp retained nearly the same folding resistance, the sulphite pulp lost so much that the tested strips could hardly withstand a double fold. With the same degree of acidity, the folding loss of sulphite paper was about 26 per cent higher than that of rag paper. The acidity in sulphite pulp paper must, therefore, be neutralized. Even so, the chemical laboratory of the American Department of Agriculture²¹ found a folding loss up to 67 per cent in rag paper with pH = 4.01 and a loss up to 93 per cent in sulphite papers with pH = 4.09. The explanation for the great deterioration in stability in a short period of seventeen years is the high degree of acid. Also, the resistance to heat, measured in terms of endurance, depends not upon the fiber material but upon the acidity.

Hoffmann²² believes that a deterioration of the paper does not occur if the acid concentration (ascertained according to Köhler and Hall²³) is less than 25.

The hope of the papermaking industry and the research workers is concentrated on the possibility of using other raw stuffs besides rag, provided an enduring paper can be produced. At the conference of experts called by the International Institute of Intellectual Co-operation in Paris in 1928, this problem was clearly presented.

The one opinion on which experts in Germany, the Library Association in London, the Government Printing Office in Washington, and the Italian research workers are in agreement is that documents and valuable publications require rag paper, since the purification of low-grade fibers can be attained only with considerable strain on the fibers in the boiling and purifying processes. In fact, paper made from new rag holds promise of a longer life than that made of used rag.

Two main classes of raw stuffs, according to the degree of durability required, are the latest proposals of the Library

²¹ "Verschlechterung von Urkundenpapieren," *Zellstoff und Papier*, XIII (1933), 354; *Paper industry* (April, 1933).

²² W. F. Hoffmann, "Effect of residual acid on rate of deterioration of paper," *Paper trade journal*, LXXXVI, No. 9 (1928), 58-60.

²³ Sugurd Köhler and G. Hall, in *Soensk Pappers Tidning*, 1925, Nos. 10-12.

Association.²⁴ The paper of Class I, for which the greatest stability is demanded, should be produced only from white, yellow, or unbleached linen rag, cotton, or flax. The materials should be well washed and freed from residue after the bleaching process. Furthermore, the addition of alum must be limited to the smallest possible amount. The pH should not exceed 6. No mineral filler should be added. Only a trace of iron salts should be allowed, if any. Handmade and surface-sized paper of this class is proposed for de luxe editions. Paper of Class II is to be produced from carefully purified and thoroughly washed pulp. The ash content may not exceed 5 per cent, rosin content 2 per cent. Only a trace of iron salts may be present and the addition of alum is very restricted. These classes are established where a "relative" durability is required. In addition to these, there is an intermediary class for which there are higher standards than those of Class II. It is produced from a mixture of rag and pulp. It is suggested that booksellers and publishers make definitive editions for libraries from enduring paper and that the standards should be extended to apply to the paper used in all private publications, particularly newspapers. The various classes of paper should be distinguished by watermarks.

The Bureau of Standards²⁵ in Washington holds that the difference between rag and pulp paper is not of authoritative significance in determining the life of the paper and that the resistance is determined rather by the chemical purity of the materials.²⁶ The durability, accordingly, depends upon: (1) alpha-cellulose content; (2) copper number; and (3) the decrease

²⁴ "The durability of paper," *Report, 1930; Papierfabrikant*, XXIX (1931), 115; *Wochenblatt für Papierfabrikation*, LXII (1931), 198; *Papierzeitung*, LVII (1931), 377.

²⁵ Scribner, *op. cit.*

²⁶ This is specifically dealt with in the American publication "Purified wood fibers," which treats the subject of wood and rag fibers. See Rasch, "A study of purified wood fibers as a paper-making material," *Journal of research*, III (1929). Quoted from Bruno Schulze, *Papierfabrikant* (1929), Book 52, pp. 815-18; G. A. Richter, "Purified wood fiber: a study of the physical and chemical properties," *Industrial and engineering chemistry*, XXIII (1931), 131. Also: "Pâtés de bois purifiés," *Le Papier*, XXXV (1932), 157-67; "La Permanence des papiers de pates de bois purifiés," *Le Papier*, XXXV (1932), 379 ff., 721-30; Rasch, "Accelerated aging test for paper," *op. cit.*, pp. 465-75; J. O. Burton, "Permanence studies of current commercial book papers," *Bureau of Standards journal of research*, VII (1931), 429-39.

of folding resistance, of alpha-cellulose content, and of copper number, ascertained by tests made before and after the paper has been exposed to a temperature of 100° C. maintained for seventy-two hours.

These three classes of papers may contain neither unbleached nor high lignin content fiber such as mechanical wood pulp, and a limit is placed on the rosin and acid content.

Paul Klemm²⁷ in Germany represents an opinion similar to that held by the Bureau of Standards. He emphasizes the fact that only limited durability can be attained when unbleached sulphite pulp is used, but stability can be brought about by breaking down the constituents and bleaching, which excludes all lignified substances and acid combinations.

We cannot reach a certain and conclusive judgment as to the durability of our present-day paper. Only the passage of time, careful observation, and a systematic series of experiments can accomplish this. We are aware of the injurious effects of atmospheric conditions (light, dampness, etc.) and organisms, which cannot be entirely excluded in the care of books. However, the most important rules for durability are: (1) good raw materials; and (2) fine technical processing of materials. Paper-making must be guided by these standards. It seems dangerous to discontinue the use of rag paper for which the highest standards have been set up, as long as the worth of other fiber materials has not been absolutely proved.

²⁷ "There is no doubt but what it is possible to achieve the same degree of chemical purity by the use of wood pulp as out of cotton and rag fibers." The basic requisite for durability is the treatment of the fibers, whereby the material is as free as possible from carbohydrate cellulose ($C_6H_{10}O_5$). The word "pure" is used in the sense of freeing the materials from waste products (*op. cit.*, p. 626).

THE CONTRIBUTORS TO THIS ISSUE

WILLIAM WARNER BISHOP: for biographical information see the *Library quarterly*, I (1931), 338; and IV (1934), 359.

JUDITH WALLEN HUNT: for biographical information see the *Library quarterly*, VII (1937), 142.

IVANDER MACIVER was born in London, England. She attended the University of California at Berkeley, from which she received the A.B. degree in 1917 and the M.A. degree in 1919. She has served the University of California Library as bibliographical assistant in the Accessions Department, 1919-20; assistant in charge of serials and exchanges in the Accessions Department, 1920-30; and as chief of the Division of Serials and Exchanges since that division was created in 1930. She is the author of two articles: "Advanced study for the library assistant," and "Year's study of exchange," which were published in the *Library journal* of June 15, 1922, and February 15, 1934, respectively.

GÜNTHER REICHARDT, who has been librarian of the Air Ministry at Berlin since August 1, 1938, was born April 14, 1909, at Freiburg/Silesia. He attended the universities of Breslau, Vienna, and Göttingen, and in 1932 received the degree of Bachelor of Arts in German literature from the University of Breslau. He finished his studies in 1933 by passing the state examinations in philology with the note "good." He then began his library career by working as scientific junior assistant at the Public Library of Breslau until September, 1934. From October, 1934, to September 30, 1935, he worked in the same capacity at the University Library at Göttingen, and from October, 1935, to September 30, 1936, at the Prussian State Library at Berlin. Here he passed his library examinations before the Examination Board for library work with honors. From October, 1936, to June 30, 1937, he was employed as librarian in the Labour Research Institute for Sociology, Economy, and Jurisprudence, Berlin, and from July, 1937, to July 31, 1938, he was librarian of the Deutsche Versuchsanstalt für Luftfahrt, Berlin-Adlershof. Mr. Reichardt is the author of numerous papers published in German.

RALPH R. SHAW, librarian of the Gary Public Library, Gary, Indiana, was born in Detroit, Michigan, May 18, 1907. He received the A.B. degree from Adelbert College, Western Reserve University, in 1928; and the B.S. and M.S. degrees from the School of Library

Service, Columbia University, in 1929 and 1931, respectively. Before he became librarian of the Gary Public Library he was assistant, Cleveland Public Library, 1923-28; assistant, New York Public Library, 1928-29; and senior assistant, Engineering Societies Library, 1929-36.

THE COVER DESIGN

IT IS not known under whom Robert Robinson served his apprenticeship, but by 1585 he was in printing and in trouble. He, with several others, took advantage of the death of John Day to print works to which Day, by royal patent, had had sole right. The offenders were called before the Star Chamber on the complaint of Day's son and other patentees. Accused of printing the profitable school-book, the *Accedence*, without license, Robinson offered the usual plea that "he so dyd being dryven therevnto throughe necessitie" and inveighed against the abuse of privileges. Unlike his partner, Thomas Dunn, he escaped serious punishment. Despite Robinson's conventional plea of poverty, he was able three years later to pay the widow of Thomas Middleton the sum of £200 for her husband's printing material, including three presses.

Robinson generally printed small, quick-selling books. News pamphlets such as Monings' *The Landgraue of Hessen his princelie receiuing of her Maiesties embassador* or Thomas Deloney's news ballad, *A proper newe sonet declaring the lamentation of Beckles*, constituted part of his productions. He also printed a large amount of good literature, including Broke's *The tragicall historye of Romeus and Iuliet*, Raleigh's *The discoverie of the large, rich, and bewtiful empire of Guiana*, and the Earl of Surrey's *Songs and Sonnets*. Occasionally he printed books in the field of politics, such as Digbie's *Dissuasive from taking away the lyuings and goods of the Church*, or of science, viz., Gerard's *Catalogus arborum*; but of theology—that great staple of sixteenth-century English printing—he issued little.

Despite occasional infractions of regulations, Robinson rose steadily in the estimation of his fellows of the Stationers' Company, and, in 1591, he represented the Company in an action regarding privileges, evidently tried before the Star Chamber. He died about 1597. His widow married Richard Bradock, who succeeded to his business.

Robinson used as one of his marks a cut showing armorial bearings—fretty with a martlet for a difference—inclosed in a wreath.

EDWIN ELLIOTT WILLOUGHBY

FOLGER SHAKESPEARE LIBRARY

LE CATALOGUE GENERAL DES MANUSCRITS DES BIBLIOTHEQUES DE BELGIQUE

Au mois de décembre, 1930, l'illustre professeur Bidez proposait à la classe des lettres de l'Académie royale de Belgique, d'accorder son patronage à la publication projetée d'un *Catalogue général des manuscrits des bibliothèques de Belgique*. Cette proposition était contresignée en outre par Dom Berlière, Franz Cumont, le r.p. Delehay, Henri Pirenne, et Paul Thomas (ce dernier remplacé depuis par mgr Pelzer). Ces personnalités éminentes constituèrent, par un vote favorable de la classe, le Comité directeur du Catalogue, et j'eus l'honneur d'être assumé au titre de secrétaire.

Le Comité se proposait pour tâche de publier les catalogues des fonds de manuscrits conservés dans toute la Belgique, à l'exception de celui de la Bibliothèque royale, à Bruxelles, dont les inventaires sont publiés par les soins de celle-ci.¹ Ces fonds sont très nombreux, mais aussi fort dispersés, car ils appartiennent à des institutions différentes, jalouses chacune de leurs droits: État belge, villes, établissements ecclésiastiques divers, monastères, etc. Il s'agissait donc, non pas de grouper en un recensement général unique les inventaires de tous ces fonds, mais de dresser le catalogue de chacun d'eux. Le projet reçut partout le meilleur accueil et l'on doit rendre hommage aux vues larges et généreuses des bibliothécaires et des autorités, tant civiles qu'ecclésiastiques, dont ils dépendent.

Au moment où le Comité du Catalogue général se constituait, je venais d'achever le *Catalogue des manuscrits de la Bibliothèque publique de la ville de Mons*, qui parut dans une collection de travaux publiés par l'Université de Gand.² D'autre part on fit paraître, hors série et à titre de publications auxiliaires, un cahier d'*Instructions à l'usage des collaborateurs*,³ et bientôt

¹ Bruxelles: Lamertin, 1901-36. 12 vols. in-8°.

² Universiteit te Gent. Werken uitgegeven door de Faculteit der Wysbegeerte en Letteren, 65^e aplevering. Gand et Paris, 1931. In-8°. Pp. xlvii, +648.

³ Bruges: Imprimerie Sainte Catherine, 1931. In-8°. Pp. 32.

après, une bibliographie des catalogues généraux ou partiels, déjà existants.⁴ Cette bibliographie faisait apparaître le travail accompli et celui qui restait à faire, car beaucoup de fonds importants par le nombre et la qualité de leurs manuscrits, ou bien n'avaient jamais été inventoriés, ou bien n'offraient aux travailleurs que des inventaires vieillis, incomplets ou défectueux.

On commença le travail par les fonds conservés à Namur, où le total des manuscrits catalogués s'éleva, contre toute attente, à plus de 600. Le volume fut publié grâce à un modeste fonds de roulement (moins de \$1,000) mis à notre disposition par la Fondation Universitaire, sous la condition que, dans la suite, la publication du *Catalogue général* serait assurée par le produit de la vente. C'est ce qui arriva, malgré la crise, mais non, parfois, sans que de grosses difficultés eussent dû être vaincues. Ont paru jusqu'à ce jour:

Vol.

- I. *Catalogue des manuscrits conservés à NAMUR* (Musée archéologique, Evêché, Grand Séminaire, Museum-Artium S.J., etc.), par Paul Faider, avec la collaboration de MM. Ferdinand Courtoy, Elie Voosen, J. Schmitz, et H. Moretus-Plantin, S.J. Gembloux: J. Duculot, 1934. In-8°. Pp. 585.
- II. *Catalogue des manuscrits de la Bibliothèque publique de la ville de BRUGES*, par l'Abbé A. De Poorter. Gembloux: J. Duculot, 1934. In-8°. Pp. 762.
- III. *Catalogue des manuscrits de la Bibliothèque publique de la ville de COURTRAI* (Bibliothèque Goethals-Vercruysse et autres fonds), par Paul Faider, avec la collaboration de Pierre-P. Debbaudt et Mme Faider-Feytmans. Gembloux: J. Duculot, 1936. In-8°. Pp. 285.
- IV. *Catalogue des manuscrits du Grand Séminaire de MALINES*, par l'Abbé Carlo De Clercq. Gembloux: J. Duculot, 1937. In-8°. Pp. 199.

Et nous avons sous presse le Volume V: *Catalogue des manuscrits de la bibliothèque principale de la ville d'ANVERS*, par Am. Dermul, bibliothécaire, volume où se trouvent décrits, entre autres, quelques beaux manuscrits de classiques latins, et qui paraîtra bientôt.

Est entièrement terminé, et prêt pour l'impression le Volume VI, qui contiendra le *Catalogue des manuscrits de la bibliothèque*

⁴ *Ibid.*, 1933. In-8°. Pp. 16.

de l'Université de LOUVAIN, par le chanoine Léopold Leclercq, fonds reconstitué à la suite du traité de paix, en partie par voie de dons volontaires, et qui apparaîtra comme très important (plus de 1,200 mss) pour les chercheurs de tous les domaines.

Le plan de travail du Comité est dès à présent clairement établi. Une rapide enquête poursuivie dans toutes les villes du pays a permis de dresser la liste, tout au moins sommaire, des principaux fonds de manuscrits. Il est intéressant d'en donner ici un aperçu.

I. FONDS ADMINISTRÉS PAR L'ÉTAT BELGE

**Bibliothèque de l'Université de Gand (env. 1,200 mss)

**Bibliothèque de l'Université de Liège (env. 1,500 mss)

Château de Mariemont (une centaine de mss., manuscrits musicaux et nombreux documents)

Château de Gaesbeek (quelques manuscrits et abondantes archives)

De plus les bibliothèques des conservatoires royaux de musique (notamment à Bruxelles et à Liège) contiennent d'intéressants manuscrits musicaux, et les dépôts des archives de l'état,* dans les neuf chefs-lieux de province, ont une section plus ou moins importante, dite des manuscrits. Il faut y ajouter les Palais de Justice, certains ministères et quelques établissements scientifiques (académies, observatoires, etc.), où l'on trouve des fonds de manuscrits spéciaux, mais relativement modernes.

II. FONDS ADMINISTRÉS PAR L'AUTORITÉ ECCLÉSIASTIQUE SÉCULIÈRE

**Bibliothèque de l'Université catholique de Louvain (env. 1,200 mss)

Bibliothèques des grands séminaires de Bruges (env. 200 mss), Gand (env. 100 mss), Liège (env. 200 mss), Malines (180 mss), Namur (120 mss), et Tournay (avec Bonne-Espérance, env. 150 mss)

** Nous avons marqué de deux astérisques les bibliothèques qui se chargent elles-mêmes de faire exécuter des photographies, selon les procédés modernes. Le prix (tarifé) de celles-ci est en général de 15 à 20 frs belges par cliché accompagné d'une épreuve positive, et de 3 frs environ par épreuve en blanc sur noir. Les procédés de la microphotographie ne sont pas encore appliqués normalement en Belgique.

* Dans d'autres bibliothèques, désignées par un seul astérisque, le conservateur autorise sans formalités, un photographe de la localité, habitué à cette besogne, à exécuter, pour le compte des particuliers, les photographies demandées. Les prix sont approximativement les mêmes que ci-dessus, mais il est bon de s'informer, pour éviter les surprises désagréables.

Les bibliothèques et archives de l'archevêché de Malines, et des évêchés de Bruges, Gand, Liège, Namur, et Tournay, ainsi que les fonds des chapitres cathédraux et des musées diocésains, contiennent aussi, chacun, un petit nombre de manuscrits. On en trouvera de même, dans les trésors et les sacristies de plusieurs collégiales ou églises. La bibliothèque de l'Université de Louvain est publique, celles des séminaires et autres ne le sont que sur références ou recommandations spéciales.

III. FONDS ADMINISTRÉS PAR LES VILLES (MUNICIPALITÉS)

- *Anvers. Bibliothèque publique principale (250 mss)
- *Anvers. Musée Plantin-Moretus (500 mss)
- *Bruges. Bibliothèque publique (600 mss)
- *Bruges. Archives de la ville (quelques mss)
- Courtrai. Bibliothèque publique (500 mss)
- *Liège. Bibliothèque publique (env. 250 mss)
- Malines. Bibliothèque publique et archives communales (env. 100 mss)
- *Mons. Bibliothèque publique (600 mss)
- *Mons. Musées Chanoine Puissant (100 mss)
- *Namur. Bibliothèque du Musée archéologique (fonds de la ville, 250 mss)
auxquels font suite les 150 mss du fonds de la Société archéologique)
- *Tournay. Bibliothèque publique (env. 300 mss)

IV. FONDS ADMINISTRÉS PAR DES INSTITUTIONS, SOCIÉTÉS, FONDACTIONS, ETC., DE CARACTÈRE SEMI-PUBLIC

Dans beaucoup de villes les sociétés archéologiques ou les musées gérés par celles-ci conservent des manuscrits parfois fort beaux. Il en est de même de certaines fondations reconnues d'intérêt public, comme le Musée Mayer-vanden Berghe, à Anvers. On peut leur assimiler les fondations charitables (hospices, etc.) qui possèdent assez souvent de petits musées ou des fonds d'archives. Ici, la consultation des manuscrits est soumise, naturellement, à certaines restrictions, et la publication des inventaires ne peut-être envisagée, dans chaque cas, qu'avec le plein accord des intéressés.

V. FONDS APPARTENANTS À DES COMMUNAUTÉS RELIGIEUSES

Ces fonds sont à tous égards propriété privée: toutefois l'importance de certaines bibliothèques assimilent celles-ci, par les

services qu'elles rendent et l'accueil que l'on y reçoit normalement (généralement sur références) à des bibliothèques accessibles au public. On y trouve des fonds de manuscrits, parfois confondus avec des archives. Il s'en faut de beaucoup que tous ces établissements aient été sollicités déjà. Mais voici parmi les principaux, ceux qui ont adhéré à l'entreprise du *Catalogue général des manuscrits*: Abbayes d'Averbode (O. Praem.), de Bois-Seigneur-Isaac (O. Praem.), de Maredsous (O.S.B.), de Parc (O. Praem), etc.; Bibliothèques des Bollandistes à Bruxelles, du Collège philosophique de la Compagnie de Jésus à Louvain, Moretus-Plantin (Museum-Artium) à Namur.

Enfin, dans la plupart des autres fonds, les travailleurs, même étrangers, obtiennent sur place, sans difficultés, l'autorisation de photographier eux-mêmes les documents. La complaisance et la générosité des Belges est, à cet égard, sans pareille.

L'attention croissante des milieux étrangers garantit dès à présent le succès du *Catalogue général*. Le gouvernement italien a déjà pris soin, par une souscription collective, d'en pourvoir les principales bibliothèques d'état; des souscriptions isolées, relativement nombreuses, nous sont venues des Pays-Bas, de la Suisse, et des pays scandinaves et même de l'Allemagne, malgré les difficultés économiques. Déjà les deux premiers volumes de la collection sont en voie d'être épuisés: *Tarde venientibus ossa*. . . .

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REVIEW ARTICLE

HISTORY OF THE LEGAL DEPOSIT OF BOOKS THROUGHOUT THE BRITISH EMPIRE¹

In the development of the legal protection of literary property the following course of procedure may be noted: (1) insistence upon public registration of the name of the proprietor of the copyright (the author) together with the title of his work; (2) obligatory deposit of a copy or copies of the property to identify the work protected; and (3) insistence upon the compulsory deposit of books in order to build up national libraries. It is the history of this last movement throughout the British Empire which Mr. Partridge has so completely documented in his recent work.

His compact volume, with a Preface by Sir Frederic Kenyon, former principal librarian of the British Museum, is divided into three parts: I. "Great Britain and Ireland (including Scotland)"; II. "The Dominions and India"; and III. "Colonies, Protectorates, and Mandated territories." A list of documents and authorities consulted and an Index are appended.

The statutes consulted and quoted in part include Great Britain, 1640-1932; Australia (including the commonwealth, South and Western Australia, New South Wales, Queensland, Tasmania, and Victoria), 1827-1928; Canada, 1832-1931; India, 1847-1927; Irish Free State, 1927; Newfoundland, 1836-1926; New Zealand, 1903-13; Union of South Africa (including Natal and Transvaal), 1854-1916.

A study of Mr. Partridge's volume leaves an impression of general accuracy, but an error in the footnote on page 114 with respect to our ad interim copyright needs correction. The amendment of December 18, 1919, increased the period from thirty to sixty days within which one copy of an English book may be deposited to secure the extended interim term of four months. When this has been done, then, during this period, the book must be wholly manufactured within the United States, two copies must be deposited, and registration for copyright must be made in order to secure a continuing protection for the first term of twenty-eight years.

The history of the legal deposit of books . . . begins with the agreement between the Stationers' Company and Sir Thomas Bodley (founder of the Bodleian Library at Oxford) to supply to that library a free copy of every new book printed by members of the Stationers' Company.² Mr. Partridge traces the

¹ R. C. Barrington Partridge, *The history of the legal deposit of books throughout the British Empire*. London: Library Association, 1938. Pp. xvii+364. 18s. Post Free.

² This agreement was signed on December 12, 1610.

subsequent history of such book deposits in the great Oxford library and other university libraries and the British Museum to the present time.

This requirement of book deposits has been subject to many interesting mutations during subsequent years, all of which are scrupulously noted by Mr. Partridge. The deposit of copies in the Bodleian Library at Oxford under the early agreement with the Stationers' Company continued up to the Act of May 19, 1662. That Act required that three copies of all new books or reprints ("with additions") should be sent to the Stationers' Company and thereupon should be deposited in the British Museum and in the libraries of the universities of Oxford and Cambridge.

In 1706 the library of Sion College, London, was added to this list. In 1709 the first copyright law of Great Britain was enacted and by it were added the libraries of the four Scotch universities—Edinburgh, Glasgow, St. Andrews, and Aberdeen—and the library of the Faculty of Advocates, thus increasing the number of copies demanded to nine.

In February, 1737, a bill was introduced proposing to add to the previous list the following five London law libraries: Inner and Middle Temples; Gray's and Lincoln's Inns, and the Library of Advocates in Doctors Commons. This proposal failed to become law.

The (University) Copyright Act of 1775, complaining that the requirement of book deposits had been "eluded by the entry only of the title to a single volume," then enacted entry to be made of the whole book and every volume of it and the deposit of all nine copies was demanded. In 1801 two additional copies were required, one for Trinity College and one for King's Inns, Dublin.

In 1836 the requirement of deposit was repealed in the case of Sion College, London; the four universities of Scotland; and King's Inns library, Dublin. Payment of an annual sum as compensation for the loss of such books in the case of each library was proposed.

The "International Copyright Act" of 1838 provided for the copyright registration of English works first published in foreign countries and foreign works first published in the British Empire and the deposit of one copy to be sent to the British Museum. It was suggested that such deposited copies should also be required for the four other privileged libraries. But it was pointed out that in that case copies of English books published abroad might be demanded by foreign governments, and the proposal was dropped.

The Copyright Act of July 1, 1842, demanded the deposit of one of "the best copies published" for the British Museum and one copy of every book "demanded in writing" by the four other libraries, "upon paper of which the largest number of copies shall be printed for sale," these copies to be "free of expense." Failure to comply involved payment of the price of the book, plus £5.

The last British copyright revision of July 1, 1911, requires the publishers to deliver at their own expense to the British Museum a complete copy of the best edition of every book published in the United Kingdom. Also they must

deliver "upon written demand" made within twelve months after publication, one copy of any book desired by the libraries of Oxford, Cambridge, Faculty of Advocates (National Library of Scotland since 1925), Trinity College, Dublin, and, with reservations, the National Library of Wales, all copies to be of the edition of which the largest number has been printed for sale.

Ireland, on May 20, 1927, provided that one copy of all books published in Saorstát Éireann be deposited in the British Museum and in Trinity College and that three copies be deposited in the National University of Ireland. But the required deposit of all English books in Trinity College by the British Act of 1911 remains unrepealed.

The long continued contention about this demand for the deposit of copies, between the librarians on one side and the printers and publishers on the other, gave rise to a flood of controversial books and pamphlets, especially between 1807 and 1821. Librarians would find many of these works interesting reading. A list of titles is appended for their convenience.

The fundamental dispute involved in this matter of the obligatory deposit of copies has been the question of the rights of certain libraries to be supplied such copies without cost and the justice or equity of compelling authors and publishers to supply the copies at their own considerable expense. Sir Frederic Kenyon³ speaks of it as "a curious and certainly not uninteresting episode in the history of the dissemination of literary culture." Ascribing its origin to the "voluntary arrangement with the Stationers' Company," he points out that

it received legislative sanction as a means of securing the censorship of the Press and has been perpetuated as an incident or condition of the securing to authors and their publishers a title to the property produced by their brains, labour, and expenditure. . . . The censorship has long expired, and neither in logic nor in law is there any necessary connection between copyright and the compulsory deposit of books.

Mr. Partridge summarizes the matter as follows:

It would now be difficult satisfactorily to replace by any other plan a scheme whereby certain privileged libraries are regularly fed with a supply of new books at small expense to the nation, and whereby at least one copy of every possibly useful work is carefully preserved for the use of present day readers, as well as for its final evolution by posterity.

It might seem to authors and publishers, however, that too little consideration is here given to their constant and long continued protests at the serious burden unwillingly borne by them during so many years. Many of their arguments carry conviction and seem to prove the unreasonableness of the demand.

In the United States the deposit of copyrighted books has never attained the urgency so long evident in England, and it has never involved much con-

³ "Copyright libraries" in W. W. Bishop and Andrew Keogh (eds.), *Essays offered to Herbert Putnam* . . . (New Haven: Yale University Press, 1929), pp. 248-54.

troversy. But it is a matter which now demands attention, especially by librarians and publishers. A brief summary of our legislation with respect to the compulsory deposit of copies of copyrighted books may be stated. The earliest legal requirement for such book deposit in a library was made in the Colonial copyright enactment of Massachusetts on March 17, 1783. In order that every published book should become the sole property of its author, a deposit of two copies in the library of the "University at Cambridge" was required.

The first Federal Copyright Act of May 31, 1790, as well as the revision of February 3, 1831, required the deposit of one copy, the former within six months after publication; the latter within three months. The repository for the copies was the Department of State of the United States. The accumulation of deposited copies was, by the Act of February 5, 1859, transferred to the Department of the Interior, and under the provisions of the Act of July 8, 1870, all such deposits and all copyright records were removed to and placed under the control of the Librarian of Congress. Meantime, the Act of August 10, 1846, had provided that the author or proprietor of any copyrighted work should deliver one copy to the Smithsonian Institution and one copy to the Library of Congress. By Act of March 3, 1865, this demand for deposit in the Library of Congress was re-enacted and was fortified by authorizing the Librarian of Congress within a year to demand any article not deposited and if then not delivered within a month, "the right of exclusive publication secured to such proprietor under the Acts of Congress respecting copyright shall be forfeited." By the Act of February 18, 1867, this drastic and unjustifiable provision was eliminated, and there was substituted the more reasonable penalty of "twenty-five dollars, to be collected by the Librarian of Congress."

The Act of July 8, 1870, for the general revision of the copyright law (which became a part of the *Revised Statutes* of 1873) required that two copies of any book or other article should be delivered to the Library of Congress within ten days after publication; thus taking over the Smithsonian Institution's copy, as its collection of books had been permanently transferred to the Library of Congress. The Act of March 3, 1891, required the deposit of copies to be made "not later than the day of publication," while in our latest general revision of the copyright laws, March 4, 1909, section 12 declares that in the case of books

there shall be promptly deposited in the copyright office or in the mail addressed to the Register of Copyrights, Washington, District of Columbia, two complete copies of the best edition thereof then published, or if the work is by an author who is a citizen or subject of a foreign state or nation and has been published in a foreign country, one complete copy of the best edition then published in such foreign country.

This is the law in force at the present time.

The demand for the deposit of gratuitous copies of copyrighted books has been generally acquiesced in by the authors of such works and their American publishers, partly no doubt because the demand has never been for more than

two copies of each book. The printing by the Library of Congress of a title-card for each copyrighted work and the distributing of such cards to thousands of libraries has served to advertise the books and to direct the attention of librarians to them, thus stimulating sales. The card section of the library also has constantly checked up the book entries and has demanded copies of books claiming copyright where the copies required had not been deposited.

This situation may be changed, however, if American librarians should propose that a large number of copies of each book should be deposited by American publishers. A tentative proposal of this character was made by the well-known librarian, Samuel H. Ranck, in a letter to the *Nation*.⁴ He suggested that the present deposit of two copies in the Library of Congress should be supplemented "by at least one additional copy elsewhere," this third copy to be filed in the state in which the "owner" (author?) was resident. Mr. Ranck admitted that in some instances it would be a burden to the publishers, "but in the vast majority of cases a matter of no consequence."

A year later Mr. Ranck enlarged his suggestion.⁵ In addition to proposing that each state preserve "a copy of every work that is copyrighted by one of its citizens," he suggested the establishment of additional complete copyright depositories in Chicago, New Orleans, Denver, and San Francisco, and the deposit therein of one copy of every copyrighted work, making six copies in all by legal requirement at the expense of the author or publisher.

A more recent proposal of this character is contained in H.R. 3699, introduced in the Seventy-fifth Congress, First session, on January 26, 1937, by Ross A. Collins, of Mississippi. His bill was referred to the Committee on the Library. It has not been reported by that Committee. His project is ambitious, viz., the establishment of five regional national libraries to be located at New York, Memphis, Chicago, Denver, and San Francisco, to be "the property of the United States." These five libraries as proposed are to be the depositories of two bound copies of all Senate and House of Representatives documents and public reports; House and Senate journals; all bills and resolutions in Congress in each parliamentary stage; the *Congressional record*; the *United States code and supplements* and *statutes at large*; the "Official Register" and the *Decisions of the Supreme Court*.

The bill authorizes the president to name, with consent of the Senate, five regional librarians for life at a salary of \$9,000 each. Fifty million dollars would be appropriated to buy ground and build five suitable structures to house the collections, \$50,000 to be available immediately for each library for salaries, equipment, etc.

Concerning copyright, the bill declares that "to insure the greater safety and better preservation of the United States Copyright deposits," section 12 of the Copyright Act of March 4, 1909, "is hereby amended so as to provide

⁴ October 4, 1894, p. 247.

⁵ "Need of additional copyright depositories," *Library journal*, XX (1895), 43-45.

that twelve complete copies be deposited with the Register of Copyrights instead of two of any copyrighted works which may be the subject matter of copyright as provided for in section 5, paragraphs (a) and (b) of the said Copyright Act of 1909." Of these twelve copies, two are to be immediately turned over to each of the five regional libraries. No deposit is required if the published edition of the work does not exceed three hundred copies and the published price exceeds fifty dollars. The requirement of the deposit of twelve copies is confined to the classes of copyright works enumerated in paragraphs (a) and (b) of section 5 of the Act of March 4, 1909; (a) comprises "books, including composite and cyclopaedic works, directories, gazetteers, and other compilations"; and (b), "periodicals, including newspapers." That section, however, enumerates thirteen other classes of copyrighted works, and for all these deposits are demanded. Why all these have been excluded from the proposed regional libraries is not explained. Among them are works of importance and works of which a large number are deposited, for example, musical compositions, dramatic works, and motion pictures. The printed catalog of dramas registered for copyright from 1870 to 1916 includes more than fifty-six thousand titles. This bill is no longer before Congress; it must be reintroduced, and with changed text if desired.

APPENDIX

BOOKS RELATING TO THE OBLIGATORY DEPOSIT
OF COPIES UNDER COPYRIGHT LAW

- A., M. "Brief observations on the copy-right bill; attempting to prove its injustice towards authors, and its tendency to injure the cause of literature," *Pamphleteer*, Vol. XVIII. 8°. London: A. J. Valpy, 1821. Pp. 523-28.
- ADDISON, JOSEPH. Mr. Addison's representation of the hardships on authors as well as booksellers, for want of a sufficient act of Parliament to secure the property of copies. Pp. 2. 4°. *Tatler*, No. 101.
- Address (An) to the parliament of Great Britain on copy-right, 1813. See DUPPA, RICHARD.
- ALISON, SIR ARCHIBALD. "The copyright question" (Anon.), *Blackwood's Edinburgh magazine*, Vol. LI. 8°. No. 315, January, 1842, pp. 107-21.
- . Same in *Essays*, Vol. II. 8°. Edinburgh: W. Blackwood & Sons, 1850, pp. 419-46.
- Areopagitica secunda; or, speech of the shade of John Milton on Sergeant Talfour's copyright extension bill.* (Anon.) 8°. London, 1838.
- Brief observations on the copyright bill. 1821. See A., M.
- BRITTON, JOHN. *The rights of literature; or, an inquiry into the policy and justice of the claims of certain public libraries on all the publishers and authors of the United Kingdom, for eleven copies of every new publication.* Pp. vii+77. 8°. London: A. J. Valpy, 1814.

- BRIDGES, SIR SAMUEL EGERTON. *Answer to the "Further statement by the syndics of the University of Cambridge."* Pp. 7. 8°. London: Barnard & Farley, 1818.
- . *Reasons for a farther amendment of the act 54 Geo. III. c. 156, being an act to amend the copyright act of Queen Anne.* Pp. 48. 8°. London: Nichols, Son, & Bentley, 1817.
- . Same in *Pamphleteer*, Vol. X. 8°. London: A. J. Valpy, 1817. Pp. 492-507.
- . *A summary statement of the great grievance imposed on authors and publishers by the late copyright act.* Pp. iv+22. 8°. London: Longmans, 1818.
- . *A vindication of the pending bill for the amendment of the copyright act, from the misrepresentations and unjust comments of the syndics of the University library, at Cambridge.* Pp. 32. 8°. London: Longmans, 1818.
- BUCKINGHAM, JAMES SILK. *Copyright laws. Speech in the House of Commons, April 1836.* Pp. 16. 8°. London: Manning & Smithson, 1836.
- . Same in *Hansard's parliamentary debates*, Vol. XXXIII. 8°. London, 1836. Pp. 440-60.
- Case (The) stated between the public libraries and the booksellers.* 1813. See COCHRANE, JOHN GEORGE.
- CHAMBERS, WILLIAM, and CHAMBERS, ROBERT. *Brief objections to Mr. Talfourd's new copyright bill.* 8°. Edinburgh, 1838.
- CHRISTIAN, EDWARD. *A vindication of the right of the universities of Great Britain to a copy of every new publication.* Pp. 36. 8°. Cambridge, 1807.
- . Same. 2d ed., much enlarged by the judgment of the court of king's bench, and general observations. Pp. 2+159. 8°. Cambridge: J. Smith, 1814.
- . Same. 3d ed. Pp. 2+199. 8°. Cambridge: J. Smith, 1818.
- . Reply to the reviews in *British review*. Vol. XIII. 1819, and *Quarterly review*, Vol. XXI. 1819. Published with *Charges delivered to grand juries in the Isle of Ely*. 2d ed. London: T. Clarke & Sons, 1819.
- "Claims of public libraries to the gratuitous delivery of books" (Anon.), *British review*, Vol. XIII. 8°. London, 1819, No. 25, pp. 226-47.
- COCHRANE, JOHN GEORGE. *The case stated between the public libraries and the booksellers.* (Anon.) Pp. 32. 8°. London: J. Moyes, 1813.
- . Same (Anon.) *Pamphleteer*, Vol. II. 8°. London: A. J. Valpy, 1813. Pp. 343-68.
- "Copyright (The) law," (Anon.), *Monthly review*, Vol. CXLVI, N. S., Vol. I. 8°. London: E. Henderson, No. 7, January, 1838, pp. 52-64. A review of 1. Speech of Mr. Serjeant Talfourd on literary property, 18th of May 1837. London: Sherwood & Co. 2. Remarks on the speech of Serjeant Talfourd. By THOMAS TEGG. London: Tegg, 1837.
- "Copyright (The) question" (Anon.), *Quarterly review*, Vol. LXIX. 8°. London, No. 137, December, 1841, pp. 186-227.

- . (Abridged.) *American eclectic*, Vol. III. 8°. New York, No. 8, March, 1842, pp. 376-80.
- . 1842. *See ALISON, SIR ARCHIBALD.*
- DUPPA, RICHARD. *An address to the Parliament of Great Britain on the claims of authors to their own copy-right.* (Anon.) Pp. 1+58. 8°. London: Longmans, 1813.
- . Same. 2d ed. (Anon.) *Pamphleteer*, Vol II. 8°. London: A. J. Valpy, 1813. Pp. 169-202.
- "Entered at Stationers' hall." *A sketch of the history and privileges of the Company of Stationers.* (Anon.) Pp. 2+32. 12°. London: E. Truelove, 1871.
- Few (*A*) words on the copyright question with some objections to Sergeant Talfourd's bill. (Anon.) 8°. London, 1839.
- FISHER, THOMAS. "Petition presented in 1814 to the Commons of the United Kingdom. (And letter on copyright.)" *Gentleman's magazine*, Vol. LXXXVII, Part I. 8°. London, June, 1817, pp. 44-48.
- Inquiry into the copyright act. 1819. *See SOUTHEY, ROBERT.*
- MARSTON, EDWARD. *Copyright, national and international, from the point of view of a publisher.* By E. M. (Anon.) Pp. 48. 8°. London: S. Low, Marston, Searle & Rivington, 1879.
- . "International copyright with America," *Academy*, Vol. II. 4°. London, No. 249, N. S., February 10, 1877, pp. 117-18.
- . "Letter on international copyright." By E. M. London, March 15, 1881. *Publishers' circular*, Vol. XLIV. 8°. London, No. 1044, March 15, 1881, pp. 201-203.
- . Same in *Publishers' weekly*, Vol. XIX. 8°. New York. No. 482, April 9, 1881, pp. 407-8.
- Reasons for a modification of the act of Anne (etc.).* 1813. *See TURNER, SHARON.*
- SOUTHEY, ROBERT. "Inquiry into the copyright act" (Anon.), *Quarterly review*, Vol. XXI. 8°. London, No. 41, January, 1819, pp. 196-213.
- . Same. "Copyright. Extract from the critique on the copyright question." In BRYDGES, SIR S. EGERTON, *The anti-critic*. 8°. Geneva: W. Flick, 1822, pp. 132-33.
- Southey . . . , and Wordsworth on the copyright question (two letters and a poem), *Athenaeum*. 4°. London. No. 549, May 5, 1838, pp. 323-24.
- Summary of evidence on the copyright amendment bill.* Pp. 8. 8°. London: Barnard & Farley, 1818.
- TALFOURD, SIR THOMAS NOON. *Three speeches delivered in the House of Commons in favour of a measure for an extension of copyright. To which are added, the petitions in favour of the bill, and remarks on the present state of the copyright question.* Pp. xxxi+148. 16°. London: E. Moxon, 1840.
- . Same. "Trois discours prononcés au parlement d'Angleterre par Sir T. Noon Talfourd; traduits de l'anglais par Paul Laboulaye." In *Etudes sur la propriété littéraire en France et en Angleterre.* By EDOUARD LABOULAYE. 8°. Paris: A. Durand, 1858, pp. 83-151.

- TALFOURD, SIR THOMAS NOON. "Serjeant Talfourd's copyright bill," *Jurist*. 8°. London, No. 19, May 20, 1837, pp. 321-23. *Legal observer*. 8°. London, Vol. XIV, 1837, pp. 125-26; Vol. XV, 1838, pp. 449-51. *Monthly magazine*, Vol. I. 8°. London, No. 5, May, 1839, pp. 583-84.
- TEGG, THOMAS. *Remarks on the speech of Sergeant Talfourd, on moving for leave to bring in a bill to consolidate the laws relating to copyright, and to extend the term of its duration*. Pp. 23. 8°. London: Tegg & Son, 1837.
- . Produce of copy-right. Extract from letter of Mr. Tegg, in answer to Sergeant Talfourd's copyright bill, *American almanac*. 1840. 12°. Boston: D. H. Williams, pp. 100-102.
- TURNER, SHARON. *Reasons for a modification of the act of Anne respecting the delivery of books and copyright*. (Anon.) Pp. 2+60. 8°. London: Nichols, Son, & Bentley, 1813.
- . *To the chairman of the committee upon the copyright laws*. Pp. 16. 8°. London: Barnard & Farley, 1818.
- UNIVERSITY OF CAMBRIDGE. ENGLAND. *Further statement ordered by the syndics of the University of Cambridge to be printed and circulated*. 8°. Cambridge, 1818.
- . Same. In *A vindication of the right of the Universities of Great Britain to a copy of every publication*. By EDWARD CHRISTIAN. 3d ed. 8°. Cambridge: J. Smith, 1818, pp. 189-93.
- . *Observations on the copyright bill, printed by order of the University of Cambridge*. 8°. Cambridge, 1818.
- . Same. In *A vindication*. . . By EDWARD CHRISTIAN. 3d ed. 8°. Cambridge: J. Smith, 1818, pp. 181-88.
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- . In *Report of Cases argued and determined in the court of King's Bench*. By EDWARD HYDE EAST, Vol. XVI. 8°. London: J. Butterworth & Son, 1814, pp. 317-34.
- . In *Report of cases in the court of King's Bench*. By EDWARD HYDE EAST, Vol. XVI. New ed., by THOMAS DAY. 8°. Philadelphia: M. Carey & Son, 1817, pp. 315-33.
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REVIEWS

19.-25. *Jahresbericht über die Verwaltung der Deutschen Bücherei: 1. April 1931 bis 31. März 1938.* Leipzig: Börsenverein der Deutschen Buchhändler, 1938. Pp. 144. Pls. 16.

To collect all current publications written in the German language and all foreign-language publications printed in Germany has been the main function of the Deutsche Bücherei since its establishment in 1912. Within this clearly delimited field it aims at completeness, a policy which seems to have been chiefly responsible for its development into one of the most important bibliographic centers of a country that lacks a "copyright library." The compilation of Germany's current national list of new publications, the *Deutsche Nationalbibliographie*, represents only one of the numerous bibliographic projects of the Deutsche Bücherei. In 1937 the library started furnishing catalog cards (*Zetteldrucke*) for publications listed in this national bibliography and in the *Jahresverzeichnis der deutschen Hochschulschriften*.¹ Although only 743,938 *Zetteldrucke* were sold during the first year of this new enterprise—less than one-sixteenth of the Library of Congress card distribution for the same period—the response to this service has been growing among German, as well as foreign, libraries.

During the seven-year period of the report the number of volumes in the library passed the one-million mark and in 1937 reached the respectable total of 1,433,507. Since the annual accessions range within more or less predictable limits, crowding of the stacks is avoided by adhering to the original plan designed by O. Pusch, who provided for progressive extensions over a period of two hundred years. To be sure, such a long-range building program involves temporary impairment of the symmetrical appearance, and is not easily adjustable to changes in architectural styles;² yet it possesses all the advantages of a well-planned future as against the disadvantages of a continually recurring need for emergency solutions in case of overflowing libraries. But whether or not the building will present an organic pattern after two hundred years will depend upon the relative constancy of functions assigned to the library in the future. The construction of the first extension of the Deutsche Bücherei was undertaken in 1936. Especially noteworthy features of the new building are the following: an emergency lighting system with a large storage battery, tunnels with reinforced ceilings to provide protection against air

¹ Formerly published by the Preussische Staatsbibliothek; since 1936 issued by the Deutsche Bücherei.

² Cf. e.g., the exterior of the main Library of Congress building, completed only a little over forty years ago, with the simple decorations of its new Annex.

attacks, soundproof walls for a few of the rooms, storage facilities for one hundred and twenty bicycles (a strange contrast to the underground parking space surrounding the new Library of Congress Annex), an open-air terrace where smoking is permitted, and ultramodern steel furniture for the new reading-room.

Reference librarians may find it profitable to peruse the report on bibliographic activities, which brings up to date and supplements several statements made in Mudge's *Guide to reference books*. As instances may be cited the addition of a new section on completed continuations and serial publications in the *Deutsche Nationalbibliographie* and a new appendix to the *Halbjahrsverzeichnis der Neuerscheinungen des deutschen Buchhandels*, which reports changes among publishers and thus currently supplements an important work entitled *Verlagsveränderungen im deutschen Buchhandel: 1900-1932* (not mentioned in Mudge's *Guide* at all).

Two of the reference works now under preparation at the Deutsche Bücherei deserve special attention. One is a bibliography of hidden (*versteckten*) bibliographies, which was still in the card-index stage and contained around 8,400 references at the close of the period of the report. If this bibliography should ever be published, as is contemplated, it is likely to become as indispensable to other libraries as it has been so far to the reference and acquisition departments of the Deutsche Bücherei. The other project is the preparation of a complete bibliography of German periodicals, a desideratum in the reference work of all periodical departments. The most recent comparable work, the *Gesamtzeitschriftenverzeichnis* of 1914, is hopelessly out of date and lists only 9,435 titles, whereas the proposed *Gesamtbibliographie der deutschsprachigen Zeitschriften* will probably contain between 25,000 and 27,000 titles (including cross-references from changed titles and subtitles); it is to be a list, not of all serials but of periodicals only. Since all the other lists of German periodicals, such as *Sperlings Zeitschriften- u. Zeitungsadressbuch*, are selective, this complete list will constitute a very essential reference tool. The Deutsche Bücherei with its 17,263 current subscriptions to German periodicals, in addition to 25,926 subscriptions to other serials, seems well qualified for this undertaking. It is characteristic of present-day Germany, incidentally, that the compilation of this list is not merely regarded as a bibliographic task but also, and perhaps preponderantly so, as a *völkische* (national, patriotic) duty.

This leads us to an aspect of the *Jahresbericht* which is of particular import to library science. Germany may be considered a unique sociological laboratory, where all institutions have had to bear up against the influence of extraordinarily pervasive changes in the nation's political and cultural ideals. Like a guinea pig in an experiment, the Deutsche Bücherei found itself subjected to an atmosphere of ever growing pressure. To note and to record objectively its reactions and adjustments to the new forces is one of the pre-

liminary tasks of library science before any hypotheses can be formulated concerning the relationship between government and the "peaceful province" of librarianship in Germany and other totalitarian states.

Did the directors of the Deutsche Bücherei merely acquiesce in the inevitable? Or did they show any genuine enthusiasm in accepting and actively supporting the new patterns of thought? The very opening page of the report gives an unequivocal answer to these questions: "Die Erneuerung Deutschlands . . . fand in der DB offene Türen, freudige Zustimmung und volle Bereitschaft." Such a statement hardly arouses any astonishment in view of the fact that as early as July 1, 1933, the Deutsche Bücherei was transferred from the jurisdiction of the Minister of the Interior to that of the Minister for Propaganda and Enlightenment of the People. Of the sixteen plates accompanying the report, the first one is a portrait entitled "Der Führer," and the last one shows the library staff, consisting partly of storm troopers in uniforms, marching down the center of a street with a large swastika flag. The report anxiously stresses the contributions of staff members to the general reorganization of political conditions and their participation in all public meetings, parades, and other events sponsored by the National Socialist movement. Five recipients of the coveted honorary golden party badge, which is usually presented in recognition of very early party membership, had come from the ranks of the Deutsche Bücherei; forty-nine staff members (about one-third of the total number) succeeded in becoming members of the one and only political party, and there are now altogether seventy-three employees of the library actively engaged as leaders or functionaries of the storm troopers and the Hitler youth. These and other figures are cited by the report in order to prove that the workers of the Deutsche Bücherei did their share in indorsing and promoting the ideals of the Third Reich.

The new spirit has also found its reflection in the general policy and the various activities of the library. Thus, the new reading-room received as its only adornment a portrait of Hitler; radio sets were provided for the auditorium and the reading-rooms so that staff members and patrons would be able to listen together to all important speeches and announcements over the air; stringent rules had to be enforced in hiring people; the compilation of a comprehensive bibliography of National Socialist literature was begun; the *Literarisches Zentralblatt für Deutschland*, a classified and annotated bibliography of German technical and academic (*wissenschaftlichen*) books and periodical articles, tried to satisfy the pressing needs of German scholars by devoting special attention to the topics of the day in the fields of politics, economics, and *Rassenkunde*; the bibliographic Appendix of the *Rundfunkarchiv* was augmented by a new subject division on National Socialist radio policy; the reference collections of the reading-rooms, after having been purged of all Communist, Jewish, or otherwise "obnoxious" works, were strengthened in such subjects as National Socialism, ethnology, anthropology,

folklore, genealogy, and history; all "undesirable" books and periodicals were withdrawn from circulation and permanently excluded from general use. Such changes and innovations exemplify the nature of the Nazi revolution with its widespread repercussions in the nation's cultural life. Of interest also is the applause which the recent annexation of Austria received; it goes without saying that this political event removed all difficulties in the acquisition of Austrian publications, particularly public documents, which are now included in the *Monatliches Verzeichnis der reichsdeutschen amtlichen Druckschriften*.³ Cordial letters of welcome were sent to Austrian libraries by the Deutsche Bücherei.

Serious difficulties were encountered in the acquisition of literature written or published by emigrants from Germany. Although this type of literature would, of course, not be acquired with the object of making it available for public use, it clearly falls within the collecting scope of the library. The usual procedure of acquiring publications, namely, the inclusion of the title of a book in one of the national bibliographies as an official acknowledgment of the donation of a copy to the Deutsche Bücherei, had to be abandoned, for to give these officially nonexistent publications too much publicity, or even to include their titles in an alphabetical list, might seriously upset the program of the Ministry for Propaganda and Enlightenment of the People. Hence they had to be purchased. It should be added, however, that, according to statistics given in the report, the expenditures for publications not securable free of charge decreased quite substantially year by year. Apparently the foreign presses were very generous. Credit must be given to the Deutsche Bücherei for having continued its collecting activities without bias, even though it had to yield to official pressure regarding the immediate use and consultation of some valuable material. Likewise the Deutsche Bücherei deserves commendation for the special effort it made to acquire all the printed material issued by the large number of organizations which were dissolved in 1933.

Ordinarily a library would feel uneasy about a steady decrease in the number of patrons, but the Deutsche Bücherei considers such a falling-off a sign of more wholesome conditions, that is, less unemployment and, therefore, fewer people who come to the library for want of anything better to do. It should be noted, however, that this is a scholarly library, not a free public library! The two classes which suffered the greatest losses were students (dropping from 4,310 to 1,838 during the seven-year period) and men without occupation (dropping from 279 to 93); the most conspicuous gain was found among the members of the military profession (almost 400 per cent), although they still constitute less than 1 per cent of the total number of users. The fact that the number of loans did not decrease to any great extent implies a

³ Formerly issued by the Reichs- und Preussisches Ministerium des Innern; since 1936 prepared by the Deutsche Bücherei.

more intensive use on the part of those who continued to avail themselves of the facilities of the library and is interpreted as indicative of greater seriousness prevailing among the remaining students.

Very illuminating also is the trend of German publishing activities as reflected in the classified statistics for the *Deutsche Nationalbibliographie*. The total output of printed matter, after having experienced a slump, rose again after 1934. Most noticeable was the increase in the fields of military science, agriculture, folklore, history, religion, and fiction, whereas politics and public administration show a persistent downward trend throughout the period. These facts are self-explanatory.

HANS MULLER

Sullivan Memorial Library
Temple University

A bibliography of British history (1700-1715): with special reference to the reign of Queen Anne, Vol. II: 1708-1715. By WILLIAM THOMAS MORGAN, assisted by CHLOE Siner Morgan. Bloomington: Indiana University, 1937. Pp. vi+684.

Professor Morgan has now completed his bibliography so far as contemporary printed works, 1700-15, are concerned. He is heartily to be congratulated on the accuracy and relative exhaustiveness here displayed. Undoubtedly his work improved as it progressed; Volume II has fewer errors than its predecessor. Of course, some of the criticism directed against the plan of the first volume¹ could equally well be applied to this, but certainly Dr. Morgan has carried out his scheme very competently.

One of his difficulties has clearly been the lengthy titles that were popular in Queen Anne's reign. Because it is so hard never to be caught napping it might have been well not to attempt to indicate omissions by a row of periods. The problem is of sufficient interest to a bibliographer to justify giving an example of the difficulties that attend attempts to include in abridged titles all information supplied in the original. Take No. 0362 as an instance: "Impartial enquiry into the management of the war in Spain, by the ministry at home, and into the conduct of those generals to whose care the same has been committed abroad . . . with an account of the several embarkations to Spain and Portugal . . . sums granted by Parliament and applied to those services." An examination of the title-page shows that the author was not guilty of the strange expression "embarkations to Spain and Portugal" but wrote "embarkations, both of British and foreign troops, that have been sent to Spain or Portugal." Another great difficulty arises from anonymous works. Take No. P294, *The Gentleman instructed . . . , 1713* attributed to George Hickes. Dr. Morgan, with a pardonable lapse of memory, forgot that the work had already been listed in the first volume (G134) and attributed to William

¹ *Library quarterly*, V (1935), 480-81.

Darrell. There are two editions listed, for 1704 and 1716; apparently there were at least twelve editions of this popular work. Another item, P229, attributed to John Evelyn, is, according to Halkett and Laing (VI, 380), the same as *the Laws of honor*. The attribution to Evelyn seems questionable.

The number of items listed for each year suggests that a high degree of uniformity has been attained in selecting items to insert. As one would expect, the year 1710 has the highest total—seven hundred and seventy—closely followed by 1712 and 1714. The number of titles in Volume II gives an average of about 650 per annum, as compared with 492 for Volume I. The increase would seem to attest a growing absorption of the public in politics, as a great national crisis approached, when the issue had to be faced whether Great Britain would receive a new dynasty or return to the Stuarts. Anyone wishing to make a detailed study of the arguments used to convince contemporary Englishmen would find Dr. Morgan's work an admirable guide.

GODFREY DAVIES

The Huntington Library
San Marino, California

The public library—a people's university. By ALVIN JOHNSON. New York: American Association for Adult Education, 1938. Pp. ix+85. \$1.00.

This is one of a series of "Studies in the social significance of adult education," sponsored by the American Association for Adult Education, in which the purpose is not to weigh meticulously every factor in each of the thirty-nine phases of adult education, but rather to produce brief, thoughtful, observations by discerning and sympathetic persons not professionally connected with the fields described. Hence, one must approach Mr. Johnson's book with the expectation of being stimulated by many valuable points of view. The author is interested more in the library's potentialities in adult education rather than in its accomplishments.

Mr. Johnson sees "three possibilities for the development of an effective system of adult education" in America. The first is extension of the work of schools and colleges. But he sees this as suited mainly to supplying "belated adolescent education"—to acquiring some further competence in one's work. When one finishes his course "he will stand, like any other graduate, at the threshold of real adult education."

The second possibility is the extension of the work of voluntary, informal organizations for study and discussion. These come nearer to meeting the requirements but they are limited by their "fleeting character," their lack of permanence, and the uncertain quality of their leadership.

The third and best possibility, Mr. Johnson believes, is "to develop the public library into a permanent center of adult education, informally, a people's university." The library has control of the pivotal factor in adult education—books; it is voluntary, informal, flexible in method; it is freer

from censorship; it is in a position to reach the largest proportion of the population.

But he also sees three obstacles, "none of them insurmountable." The first is the librarian's reverence for certain hampering abstractions: he thinks he must give the people what they want, without knowing what that is, or even knowing that the people really know what they want. Interpreted in terms of book selection and kinds of service, this means a safety-first policy of supplying a little of everything—good, bad, and indifferent. This may be a proper philosophy for a mercantile establishment dedicated to profit, but not for a public institution dedicated to education. Mr. Johnson also found librarians frequently taking refuge behind another defense mechanism—that "all good library work is adult education." His comment is that this "may be philosophically tenable but it is useless for action." He believes that the library cannot, at present, be called an educational institution, even though some of its services may have educational consequences in possibly one- or two-sevenths of its patrons. The reference and fact-finding services are "to be regarded as community cooperation in the supplying of working tools rather than as educational" services. The haphazard reading which gives bulk to circulation figures is educational only by occasional chance. The library is an educational institution when it becomes concerned with *guiding* readers, not merely with *supplying* them. Even in our fine subject divisions "one gets the impression that giving advice to readers is one of the minor functions of such departments."

The second and "perhaps greatest obstacle" is the "inadequacy of personnel." It is evident throughout that Mr. Johnson has the highest respect for most of the library staff members he met. He sees weakness in the personnel system and objectives, rather than in individual personalities. The library personnel is not selected and trained for educational leadership but for the functions of what he calls "pure librarianship, the impartial custodianship . . . of books." He devotes a chapter to readers' advisory work and leaves the impression that he regards this as the most significant library activity in adult education. His analysis of the limitations, methods, and possibilities of advisory service is keen and revealing. He has penetrated directly to essentials and overlooked nothing that needed clinical comment. "'Knowing people' for the purpose of directing education is something quite different from knowing them as a talented receptionist Something like a psychological technique is required." Another chapter is given to "Forums, lecture courses, classes" as sponsored by the library. The library has an obligation to foster such activities whenever the clientele or other factors require an informality of setting and sponsorship that the more formal educational institutions cannot supply. For this, a staff capable of real "educational leadership" is needed.

The last obstacle is finances. To do the job envisaged, the library must have much larger appropriations. The work of a readers' adviser serving

carefully five hundred persons a year is certainly commensurate educationally with that of a high-school instructor serving one hundred and sixty, and should be compensated on at least the same basis. The public must realize that real education is not cheap. Librarians must realize "that in America education is and has always been the magic word," and that this is the lever effectively to raise appropriations; not large, total-circulation figures which, to most appropriating bodies, merely represent recreational activity.

It may seem that this is a very critical study, but one is seldom conscious of criticism. It is as though a genial doctor, with unmistakable sympathy, described our weaknesses with such intelligence, tact, and humor that we forget to take offense. It suggests the experienced diagnostician who finds his way promptly to the important difficulties without having to examine every small detail. Behind it plainly is a mind rich in familiarity with everyday life situations and in the wisdom that comes of living and observing widely, a wisdom not obscured by its abilities in theoretical social science.

It would be hard to exaggerate the value to libraries of this study by one of the keenest educational sociologists of our times. It revivifies the picture of perhaps the library's greatest opportunity, "discovered," as we thought, a dozen or fifteen years ago, but, as is evident to the reader of this little book, not yet realized.

JOHN CHANCELLOR

American Library Association
Chicago, Illinois

The Maryland press, 1777-1790. By JOSEPH TOWNE WHEELER. With an Introduction by LAWRENCE C. WROTH. Baltimore: Maryland Historical Society, 1938. Pp. xiv+226. \$4.50.

Mr. Wheeler has performed the commendable though inconspicuous task of extending another writer's distinguished work—Lawrence C. Wroth's *History of printing in colonial Maryland 1686-1776*—and his bibliography will always be overshadowed by Mr. Wroth's pioneer research. Nevertheless, the new book is a notable and scholarly piece of work, to which Mr. Wroth pays justifiable tribute in the Introduction.

As indicated by his title, Mr. Wheeler has confined his investigation to a period of fourteen years; but they were particularly eventful years in Maryland's history, covering the major part of the Revolution, the period of the Confederation, the adoption of the Constitution, and the beginning of our federal government. He has listed 550 items, comprising all Maryland imprints except paper money and certain legal forms. This number compares with 393 imprints found by Mr. Wroth for the preceding ninety years. Prefacing the Bibliography, Mr. Wheeler has written a 75-page narrative of the more important printing establishments and their proprietors. Physically the book has been composed purposely to resemble Mr. Wroth's volume.

A bibliographer always has the advantage over his critics of having made himself a lone expert in his particular field, and only by accident could another person know of a title omitted from his list. However, even Mr. Wheeler would admit that he has by no means written the last word on Maryland printing in this period. Rarely are bibliographies complete when issued. Too many pamphlets have to be reported as "not having survived"; first and last issues of newspapers as "not yet found"; books as "lost." In some instances biographical information is scanty, although Mr. Wheeler has done admirably in deducing from various small clues the probable activities of individual printers. If, as is very likely, this book serves to elicit from unsuspected sources additional entries or further biographical data, it will have fulfilled one of its purposes in being published.

Its principal use, of course, is as a check list for librarians and collectors, to whom the exact transcript of titles and full collation will be a delight. Less obvious is its value to students of Maryland and Colonial history, who will be grateful for the extended entries and especially for the narrative portion. Historians have been slow to appreciate bibliographical studies as other than handy reading lists, despite the fact that the product of the printing press constitutes a record of a community's culture and the popularity of a book a measure of its effect on public opinion. The fault is not entirely with the historians; our earliest bibliographies, such as Haven's, Sabin's, Hildeburn's, and Evans' lists, hardly invited study by historians. But with the publication of Mr. Wroth's monumental work in 1922, bibliography attained a new standard and warranted attention as a separate social science. Mr. Wheeler's volume is on the same high level. Both writers approached their investigations historically minded and introduced their listing of imprints with narratives of the more significant facts discovered by them regarding the spread of printing, the rise of newspapers, the diversified output of the presses, and the lives of the publishers—facts which lie scattered and obscured in a plain bibliography.

Mr. Wheeler has added new information to the biographical sketches of William Goddard and Mary K. Goddard written by Mr. Wroth. He has also given accounts of Eleazer Oswald, Edward Langworthy, James Angel, Matthias Bartgis, the Greens, and a few other printers of this period. The book is illustrated with eighteen plates—portraits, title-pages, and broadsides—and contains an Index.

Maryland has been fortunate in having two such careful historians of its printing. Mr. Wheeler hinted that he had notes for a bibliography which would extend well into the nineteenth century; it is to be hoped that he will carry on his work.

HOWARD H. PECKHAM

*William L. Clements Library
University of Michigan*

The geography of reading: a study of the distribution and status of libraries in the United States. By LOUIS R. WILSON. ("University of Chicago studies in library science.") Chicago: American Library Association and University of Chicago Press, 1938. Pp. xxiv+481. \$4.00.

This is a bewildering book, ideal in effort, overwhelming in statistical mass, objective in treatment, sweeping in deduction, and persuasive in recommendation.

The title-page is rather daring—or is it misleading?—when it makes the "geography of reading" synonymous with "distribution and status of libraries." The Introduction, however, disclaims so narrow an interpretation and admits that many kinds of reading are quite independent of libraries.

The book sets off by assuming that "the library is available to Americans as an effective instrument in maintaining and promoting a clear understanding of the problems with which citizens are confronted in a highly complex, dynamic democracy."

In its survey of the field, first comes study of the distribution of library resources throughout the country—an effort to learn what John Doe on the Pacific Coast and Richard Roe in the Gulf region would say if they matched their experiences in trying to find books in their local libraries or if they set out to buy a book, textbook, or latest best seller. The result we all know: that libraries are unevenly distributed.

Then came the second question: How about the other social, educational, cultural affairs we ordinarily expect to find bearing a more or less easily recognized relation to libraries? After that follows naturally enough the study of the part these institutions play in the distribution of libraries.

The sheer weight and mass of the supporting apparatus and documentation stand out strikingly when one notes that fully half of the 442 pages of text is given to graphs, diagrams of every imaginable complexity—in all some 117 tables and 173 "figures." There are 25 pages of Bibliography, 18 of Index.

It would be well to get the comment of a trained statistician on the applicability of statistical methods to such problems as are here set before us. One librarian, not a statistician but better able than I to analyze things of this kind, calls attention, for instance, to the danger of deductions from registration statistics; some libraries re-register every two years, some three, some five, some never. I failed to find any statement as to how much checking of methods from the general point of statistical technique applied to so intangible a problem as that of reading was done by Dr. Wilson and his collaborators.

At the end one lays the book down and says, "Of course, that's just what everybody knows; more libraries in the Northeast than in the Southwest, in city areas than in the country; book-buying and book-owning and book-reading generally larger in those same regions than in places with fewer libraries; these variations partly due to, or at least on an equal footing with, the income or wealth or other intellectual or cultural indexes." Having said that, there come the next questions: But, was I really sure? Did I actually know?

How much was impression, how much conviction, based on facts? How did I know I was right? Here are proofs of those conclusions and assertions. We have had many surveys of the American library scene, many statements of belief and conviction, but none come to mind so impressive in statistical buttress and support as we find here spread before us.

When it comes to a qualitative rather than a quantitative study of this problem of libraries and reading, however, there is a somewhat different picture. No one has yet found a satisfactory measuring-rod for the different kinds of reading done. Books meet so many different demands, match such tremendously varying pleas, are so intangible, but at the same time so unmistakable in result, and insure such widely sweeping responses that quantitative comparisons or measurements are almost hopeless.

Those quantity yardsticks and test tubes are, however, the only means we librarians have been able so far to devise. Some day, someone will surely hit on some way to measure the variation in influence between the trivial book and the one really worth while.

Two or three questions certainly will demand reply, whether, for example, the geography of reading is really synonymous with the distribution of libraries. Plenty of isolated scholars, village philosophers, voluntary Robinson Crusoes, doubtless stand out who fashioned their convictions, set down their message, wrote their books, happily independent of other books or of libraries. Thoreau needed no library at Walden Pond. Gregg's *Commerce of the prairies* was superbly indifferent to the author's fellow-writers. But those are far from typical. The overwhelming majority of us know well enough that if we are in a region where libraries are plentiful we are usually in a place where people read freely, frequently, steadily, as a matter of course.

Again, is it proved that nonlibrary reading (book clubs, bookshops, current magazines) has any connection with library reading except that the two are studied at the same time?

One more question: How do we know that the library is "an effective instrument in maintaining and promoting a clear understanding of the problems with which citizens are confronted in a highly complex, dynamic democracy?" Every librarian assumes and hopes it is such an instrument; one, at least, if not the only, means to such an end. Belief and conviction are certain, unmistakable, unswervable. Even if mathematical demonstration fails, we insist that observation and general impressions are of real weight and value.

What relations, however, can we show between the stock of books on hand in the social sciences, circulation figures, character and quality of book selection in a given library, and the kind of government, the standards of public service, shown in that library's city, county, state? How much effect on criminal statistics do the books on ethics, social problems, causes and prevention of crime in the local library carry in John Doe's town or Richard Roe's region? Do the lists we print of books on sit-down strikes or open versus

closed shops or union-labor apprentice systems have any effect in easing the struggle between capital and labor?

How effective an instrument was the American library in 1837 in "maintaining and promoting a clear understanding of the problems with which citizens" were then faced in deciding how to meet the crisis that then strained every fiber of the body politic? What is the ratio between the part the library played then and the part it has played of late years in solving the problems clamoring for solution since 1929? If it has helped, how can it help more? If it has not helped, is it the fault of the library or of public indifference to any help from books? Do some books or types of books help and others fail? Individuals certainly have been helped. Hundreds bear witness to the way and the amount the local library helped them. And individuals surely make up the community. But why is the effect of the library heaven so small? Is the mass too large or the heaven too weak? Is its result stronger today than a generation ago? Will it increase, decrease, remain static? Can we learn anything reliable, demonstrable, definitive about it by the statistical approach?

Appearance of this study will certainly lead to further explorations in the field of the influence of books and reading. Its recommendations will meet ready approval in general. More study of reading is necessary, of its pattern, its social significance, of the relations between book publisher and seller and reader; extension of planning for library development for state and other regions, extension of library service to undernourished regions, extension of work with schools, extension of the bibliographical services of the Library of Congress and other federal libraries, assumption by the state that library support is of equal importance with support of schools. Finally, realization by librarians that they must adjust their ideals and activities to their responsibilities.

When it comes to the recommendation that equalization of library resources "can best be done through state and federal participation rather than through complete dependence upon local support," acceptance or rejection will depend to a certain extent on when and where you were born, whether you lean to centralization or diffusion of government control, whether you are individualist or collectivist. The year 2038 will certainly look with interest on the efforts 1938 is making to settle that question. Its comments on the result would be instructive.

HARRY MILLER LYDENBERG

New York Public Library

Beiträge zur Sachkatalogisierung. Herausgegeben von SIGISMUND RUNGE. ("Sammlung bibliothekswissenschaftlicher Arbeiten" 45. Heft [II. Serie, 28. Heft].) Leipzig: Otto Harrassowitz, 1937. Pp. vi+124. Rm. 8.

The trend toward co-operation and unification in library procedure which Germany shares with other countries is exemplified in this symposium on

classed (systematic) cataloging. The general editor, Sigismund Runge, is well known in Continental library circles for his contributions to the subject. His collaborators are also well-known members of German library staffs.

In the introductory article, Runge traces the movement from the appearance of the Dewey Decimal Classification in 1876 (with mention of the earlier comments of Ebert and Hartwig) to the later contributions of Schwenke in 1913 and the 1927 and later conferences of the German Library Association. Since the classed catalog depends primarily on the system of classification used, the theoretical and practical difficulties of several leading systems are discussed. "In my opinion," says Runge, "it is high time that something be done at once. Most libraries . . . cannot wait any longer and, if a unified, co-operative solution is not found within a reasonable time, they must on their own responsibility invent their own new system, be it good or bad."

In the following article, Sigmund von Frauendorfer, author of the classification of agricultural sciences in use in the International Institute of Agriculture in Rome, discusses the limits of a unified classed-catalog system. He notes the unification effected by the Library of Congress through its card service with the L.C. and D.C. numbers and other bibliographical data, its depository catalogs, and its Union Catalog. He considers the very general use of the Dewey Decimal Classification in reality a second national unifying factor in library practice. The classed catalogs of the John Crerar, Pittsburgh Carnegie, and United Engineering Societies libraries are referred to as "admirably planned and in no way showing signs of decadence." Although international co-operation is recognized as an aid to international understanding, he believes that a necessary recognition of the national spirit makes national rather than international co-operation the desired goal.

Behind unification there stands fast an ideal, a spiritual motive. The spirit of the time presses out from the sphere of materialism; we discover the sense of a common cause; we overlook and wish to overlook, those things which divide us as individuals and, on the other hand, consciously and with all our might we emphasize what binds us together. We are—there can be no doubt of it—on the forward march along the whole line on the way toward synthesis.¹

Three great American classification systems are next discussed. Runge compares the Dewey Decimal Classification with its Brussels expansion. Both friends and critics of the D.C. will be interested in the keen but friendly analysis. Runge concludes: "As we survey the total results of the Dewey Classification, it must, in spite of its many weaknesses, be awarded a dominant place in the history of classed cataloging . . . These characteristics have proved their unfailing virility for almost sixty years: the decimal divisions, the possibility of unifying related groups and an index."²

Friedrich Klemm discusses the Cutter Expansion Classification. He thinks: The historical significance of the Cutter classification as a system lies neither in founding a new scientific system, nor in the introduction of the "Expansive Method," but

¹ P. 23.

² P. 43.

rather in its recognition, that it is useful to separate certain local form divisions as well as certain general types of material from the regular schedule of class divisions and to put them into tables of their own. In this way Cutter's work in classification is a milestone on the way from Dewey to the Brussels Decimal Classification with its comprehensive auxiliary tables.

Helmut Mogk's discussion of the Library of Congress Classification, while critical, praises the abundant provision for specific subject-headings and for future expansion.

Three specific German library catalogs are next discussed. Bruno Fass explains the new shelf-catalog of the State Library of Saxony at Dresden. Claus Nissen discusses the Mainz subject-catalog of the Mainz City Library. He concludes, somewhat dogmatically: "The dream that one can make a real subject-catalog without classification is over and it can confidently be said that the librarians in all countries share in this disillusionment."¹ Werner Schmitz describes the technique of the classed and shelf-catalogs of the National Library at Berlin.

Runge's final article, on the notation in a classed catalog, is a fairly detailed analysis which reaches the safe conclusion that none of the existing notations is completely satisfactory under all conditions.

This treatise assembles material on a subject of vital interest to most European libraries and not without interest to the United States. The philosophy of the classed catalog is not ignored but the aim of the authors is primarily practical. Though the development of American libraries has given prominence to the dictionary catalog, it should not be forgotten that Melvil Dewey himself installed a classed catalog in the New York State Library. He would be rash who would assert that the eclipse of the classed catalog is final anywhere or that American librarians should be unaware of its merits. The serious research shown and the wealth of bibliographical references from Hartwig to Bliss should strengthen the catalogers' belief in the value of their work. Possibly even some restless juniors and ambitious library-school students may be convinced (if they read, or are assigned to read this work) that some kinds of routine work may at times be worth the best efforts of even the young and inexperienced.

FRANK K. WALTER

University of Minnesota

A brief account of the principles and formative period of the Union Library Catalogue in Philadelphia. By PAUL VANDERBILT. Philadelphia: Union Library Catalogue, 1937. Ll. 42+6 (mimeographed).

As noted on the title-page, the first half of this case history was first published in *Library trends*.² This portion was, in effect, a description of the early history of Philadelphia's union catalog and its manufacturing devices down

¹ P. 87.

² Chicago: University of Chicago Press, 1937.

to August, 1936. The second half continues the story to August, 1937, and is here set forth for the first time.

The Philadelphia union-catalog project—three million titles from one hundred and fifty libraries—has been the best publicized of the several operating in recent years. It has been of great value in demonstrating technical and labor devices useful to other union-catalog projects. It grew out of a series of three events which occurred within less than two years of each other. First, a group of professors in local colleges and universities issued a proposal for such a bibliographical device in October, 1933. This was met with great interest and enough money to permit experimentation. During the experimental period the possibility of using microfilm as a transfer medium was presented through the work of the Joint Committee on Materials for Research on A.A.A. and N.R.A. hearings. Finally, as the experimental period ended in the summer of 1935 a large quantity of W.P.A. labor became available.

This project demonstrates on a large scale the value of microfilm as a medium for transferring information from library catalogs to the union catalog. Less expensive than any current form of photostat, much faster than type-writing, it seems an ideal transfer medium for volume work. We must remember, however, that it was used in a local union-catalog project—"local" as distinguished from "state" or "regional"—and the one hundred and fifty libraries involved comprised many large collections. It would seem that for small collections, widely scattered over a state or region, local W.P.A. typing projects would be better.

It will be instructive for those about to undertake a union catalog to observe the Protean transformations of the Philadelphia project. Beginning with the intention of photostating entries from some sixty-five libraries, it quickly shifted to the expectation of checking microfilm against an L.C. depository, supplying deficiencies with entries copied from the film. The advent of W.P.A. labor caused abandonment of the expensive L.C. file in favor of total transcription by typewriter. Finally, it was found desirable to buy L.C. cards wherever they had been used by the owning library.

Editing entries for filing seems to be handled with a relatively small amount of apparatus. The principal aid is a film of the University of Pennsylvania's L.C. depository into which has been filed entries from other card-producing libraries. The entire file has not been filmed, only each variation in form of entry. This film, with the *United States catalog*, the *Union list of serials*, occasionally the *British Museum catalog* and other special lists, constitute the reference tools.

As trays are edited, the cards are sent to the National Union Catalog at the Library of Congress where checking adds about 36 per cent of the items to the Washington catalog as new. In this connection it is worth noting that the Philadelphia project continues to demonstrate the surprising lack of duplication between libraries. So far as a check has been made it appears

that, counting variations in imprint as separate items, from 60 to 75 per cent of the items exist in one library only; considering totally different titles only, about 40 per cent are unique.

With filing only partially completed, use of the catalog had already begun by August, 1936. Phone calls from individuals and libraries for the location of specific items constitute the principal use. Calls for railroad, agricultural, labor, and statistical reports comprise over half the demand, as opposed to calls for rare and "scholarly" material.

In anticipation of a demand for a subject approach to the union catalog, a classified file of L.C. cards for bibliographies has been developed. Administrators of large and learned libraries will be interested to see how well a collection of subject bibliographies will substitute for conventional subject analysis.

It is to be hoped that Mr. Vanderbilt will take time to write a more detailed and better-organized history of this imposing venture. The work under review, valuable as it is to those concerned with union catalogs, is too fragmentary to stand as a final record of the Union Library Catalog of the Philadelphia metropolitan area.

DONALD CONEY

University of Texas

Selected list of current foreign financial sources. Compiled by ELEANOR S. CAVANAUGH for the Financial Group, Special Libraries Association. New York: Special Libraries Association, 1938. Pp. 54. \$2.00.

Since the United States assumed a creditor, instead of a debtor, position in the financial world, librarians, economists, and statisticians are being called on more and more to provide financial data on foreign countries. To all such workers, this check list of sources will prove a boon.

The aim of the compilation has been to present a selected list of current sources which have been found to be of greatest value in special libraries that maintain foreign collections. The list includes yearbooks, bank letters, financial and trade publications, newspapers, magazines, stock-exchange bulletins, quotation sheets, and some few financial reports of foreign governments in cases where such reports complete the background necessary to an understanding of the financial situation of that particular country. The inclusion of prices of publications wherever possible is an item not often found in such compilations. This should save the user much valuable time.

In her Foreword the compiler voices the following warning:

... listing applications of foreign securities sold in America are valuable sources of information for financial data. Budget speeches, estimates, and financial statements of governments also should be included in any collection of foreign material. Information on the key industries in those countries should be acquired. This type of information is too extensive to be noted in a list such as this but should not be neglected in rounding out a foreign collection.

The annotations indicate exactly what type of data is to be found in each of the publications. Their accuracy is assured by the fact that the compiler herself examined 80 per cent of those listed, while other outstanding special librarians provided notes for the other 20 per cent from their own collections.

Miss Cavanaugh's many years of experience as librarian of the Standard Statistics Company, New York, make her eminently qualified to prepare such a list, which in its general makeup and typographical clearness maintains the high standard set for the reference tools issued by the Special Libraries Association.

RUTH SAVORD

Council of Foreign Relations
New York City

Catalogers' and classifiers' yearbook, No. 7. Compiled by the CATALOG SECTION OF THE AMERICAN LIBRARY ASSOCIATION. Chicago: American Library Association, 1938. Pp. 91. \$1.25.

This issue of the *Yearbook* is dedicated to that mentor of catalogers, Margaret Mann, on the occasion of her retirement from the Department of Library Science, University of Michigan. William Warner Bishop offers a tribute to her in an article which describes her eminently successful career in practical cataloging and inspired teaching. This is followed by a Bibliography of her published writings, compiled by Eunice Weed. Miss Mann's influence on the present generation of catalogers, especially through the medium of her textbook, can hardly be overestimated, and it is fitting that homage should be paid by dedicating to her this *Yearbook* which contains so much that is stimulating.

Those who attended the New York conference will be glad to see in print the paper of Thomas Franklin Currier, "Permanence through change," and that of Wyllis E. Wright, "Some fundamental principles in cataloging," both of which were read before the Catalog Section. Some of the charm of Mr. Currier's personal delivery is lost on the printed page, but his comparison of the growth, decay, and care of the catalog with the processes of change in a forest is nonetheless valid and useful. Mr. Wright's paper shows a refreshingly broad outlook as he turns a bright light on some of the inconsistencies of cataloging rules.

Susan M. Haskins contributes a scholarly study of "Some ventures in cataloging at the Bodleian library," in which she relates that library's history and methods of cataloging, leading up to a description of the modernization and expansion of the library and revision of its catalog now in process and the progress in co-operative cataloging among the various Oxford libraries.

"Cataloging problems needing investigation" is a compilation by Henry T. Black of some suggestions made by head catalogers of university and large public libraries. A minor but frequently made error may be noted here. Mr.

Black's footnote of acknowledgments locates Miss Alice Humiston at the University of California instead of the University of California at Los Angeles. Mr. Black has grouped the stimulating suggestions of the catalogers under the following heads: classification problems, cataloging—general problems, co-operative cataloging, subject headings, administration of catalog departments, the use of the card catalog, the training of catalogers, and the literature of cataloging. He concludes with the suggestion that a special journal of cataloging should be launched, to act as a stimulus to research in this field. The publications committee, however, points out in its Foreword to this *Yearbook* the difficulty of gathering even sufficiently interesting material for an annual! Administrators might take note, in this connection, of the protest voiced by Miss Charlton and quoted by Mr. Black that catalogers, who would be best qualified for the task, are too swamped with their daily work to take the long and philosophical view or to do research on the professional problems in their own field. Head catalogers also might take note of Miss Robinson's point, that better classification of duties might relegate much labor to clerical assistants, thereby freeing catalogers from part of their heavy burden.

Two major themes recur throughout these articles. The first is a realization of the importance of looking at catalogs from the point of view of the use that is made of them, and of constructing them always with a view to that use. Mr. Currier emphasizes the need for flexibility, for pruning and renewal, to meet changing demands and interests. Mr. Wright makes an even more pointed statement to the effect that the value of a catalog lies in its usefulness rather than in its consistency. "The final test of any rule . . .," he says, "must be its success in bringing together the book and the person who needs that book." Mr. Black quotes the suggestions of several catalogers that studies should be made of the use of the catalog by readers, "based on actual behavior patterns," and other suggestions deal with the need for better instruction in the use of the catalog and the need for a handbook on its use, more adequate than any now available.

The second theme which may be traced through these articles is the ever growing problem of size in modern card catalogs. Wright mentions several points: (1) the "complexity of entry under place names in our larger catalogs," which makes some of our rules for entry under place less useful than they were intended to be; (2) the growing need to incorporate standard title, language, editor, and date in headings for voluminous authors as catalogs increase in size; (3) the vast amount of work which would be entailed by any change in rules now well established, no matter how inconsistent those rules may be; (4) the advantage of the printed book or microfilm catalog over the huge card catalog with its problems of filing and replacement of worn-out cards. Miss Haskins' discussion of the tremendous task of revising the Bodleian catalog includes the interesting statement that a card catalog was once considered there, but the plan was discarded because it was felt by the

authorities to be "better suited to a small or special library." Miss Ambuhl makes the suggestion that a study should be made of authority files and official catalogs, "a burden to house and an expense to keep up" even in the library of moderate size. She also asks for a discussion of any experiments which libraries have made to limit the size of their catalogs. Mrs. Radtke's suggestion is that a study should be made of analytics and of changes in cataloging procedure made possible by the work of bibliographers, e.g., using indexes in juxtaposition to the catalog. Two catalogers are quoted by Mr. Black as asking for a study of the possibility of cutting down on the number of cards made, especially title cards, in order to reduce both size and difficulty in the use of the catalog. Miss Smith specifically mentions selective cataloging as a possible solution. Three catalogers, says Mr. Black, want to see a reconsideration of the arguments for and against a separate subject catalog—a division often proposed as a possible way of simplifying the use of large catalogs and actually in use in some institutions. It will be interesting to see the reaction to the change over to this system which has been accomplished very recently in the University of California Library.

John R. Russell as chairman gives a "Report on the work of the co-operative cataloging committee." His statistics are an indication, however rough, of the high cost of good, carefully revised cataloging of difficult material. The cost, including all administrative expenses of the committee, averages over the four years of work \$1.84 per title. No one who has used the cards, however, would deny their great value. It is to be hoped that the increasing sales will eventually make the service self-supporting and that in the meantime subsidies can be provided so that this worth-while project may not be allowed to lapse.

The next section of the book consists of "Abstracts of theses presented to library schools in 1937 by students majoring in cataloging." At least three of these would be valuable reference tools for catalogers in university libraries. One, "Principles governing the formation and use of Spanish names of persons which may be presented as a help for catalogers," by Charles F. Gosnell, is listed but not summarized since it is to be published. It is to be hoped that Deily's "The cataloging of *Beowulf* materials and other Anglo-Saxon poetic remains," and Miss Howell's "Cataloging entries for anonymous epics" will also be published. In the absence of Library of Congress headings for the more obscure or unusual titles, the two theses mentioned should be valuable authorities.

A feature of former yearbooks, the "Bibliography of cataloging and classification," has been discontinued, since the annual "Library literature" now covers that field.

The book concludes with the constitution and list of officers of the Catalog Section, and a supplement to the "Biographical directory of the members"

which was published in *Yearbook no. 6*. These features make the book valuable to all catalogers.

MIRIAM C. MALOY

*California State Library
Sacramento, Calif.*

Christopher Marlowe (a concise bibliography). By SAMUEL A. TANNENBAUM. ("Elizabethan bibliographies," No. 1.) New York: The author, 601 W. One Hundred and Thirteenth St., 1937. Pp. 95. \$3.00.

This is the first volume in a projected series of bibliographies which will include treatments of Ben Jonson and of Shakespeare's sonnets. The author is well known for his work in the Shakespearean field, in Elizabethan handwriting and forgeries, and in editing the *Shakespeare Association bulletin*.

The book fills a gap in the Marlowe field, affording ready and easy reference to the study of the poet. The sections included are: Plays, Poems, Collected works, Extracts, Songs, Biography, and Commentary. In addition, there is a splendid "Index of names and subjects," which is most useful.

The first five sections of the volume are arranged in chronological order. In the last, the largest and most important division, the items are numbered but otherwise unarranged. Such a system makes necessary an index of authors, at least, in order that the user may find all that a certain writer said of Marlowe. Here, though, we have not only an Author Index, but also a Subject Index, made possible only because the compiler read the items he has here listed. Indeed—and this is unusual in these days of hurried, slipshod bibliography—the compiler has actually seen all the material he here names.

Worth reprinting are the opening sentences of the Foreword: "I make no excuses or apologies for this series of Elizabethan bibliographies. They are as nearly complete as a single person working steadily for five years in one city (even though that city is New York) could make them." And the chief sources of this work are the two greatest New York libraries, the great public library and Columbia University Library.

There is only one definite lack; in such a book a table of contents should have been included. But perhaps the presence of the Index makes up for this.

No well-equipped Elizabethan reference shelf can afford long to be without this volume. May we have more like it in accuracy and completeness.

THEODORE G. EHRSAM

*Graduate School
New York University*

The selection of United States serial documents for liberal arts colleges. By KATHRYN NAOMI MILLER. New York: H. W. Wilson, 1937. Pp. xii+364 (planographed). \$2.50.

This study, conceived as a practical aid to college libraries in the selection of United States serial documents, was made under the auspices of the Public

Documents Committee of the American Library Association and the Graduate Library School of the University of Chicago.

In general, the procedure followed was similar to the "pooled judgment" technique employed by Dr. Eugene Hilton for his study of *Periodicals for the college library* and involved sending a list of 737 titles to be checked as to value and use by faculty members of liberal arts colleges accredited by the American Association of Universities. The statistical tables, which comprise the main body of the work, are based upon returns from eighty-one institutions, of which thirty-two have fewer than 500 students, thirty-three have from 500 to 1,000, and sixteen have over 1,000; sixteen are men's colleges, eighteen women's, and forty-seven coeducational. Twenty-eight states and all geographical sections of the country are represented. From these data it is evident that the group of co-operating institutions was a highly representative one.

Votes as to "indispensability" and "desirability" of each title were tabulated, composite weighted scores and maximum potential scores (total number of instructors voting on subject multiplied by 2, the highest value which could be assigned) were computed. A percentage index, upon the basis of which each title was ranked (by subject), was then calculated by dividing composite score by potential score. A composite percentage index for each title was also determined.

The principal results, as presented in the statistical tables, are: (1) rank order and percentage indices of x number of U. S. serial documents for use in each of eleven college subjects chosen from the list of 737 titles by y number of instructors; (2) rank order and percentage indexes of 631 documents for use in the library chosen by 74 librarians; (3) 727 titles ranked according to composite index of checking for all subjects; (4) 727 titles in the composite ranked list arranged according to issuing office.

Probably the greatest and most immediate practical value of Miss Miller's study will lie in its use by colleges, and especially by college librarians, as a means for checking and evaluating their own holdings of serial documents. For example, the college which does not have all of the fifteen highest percentage-index titles for use in economics should seriously question whether it should not fill its lacks; all of these fifteen received percentage indices of 50.58 or higher and all were considered indispensable by from 28 to 62 instructors. This does not mean that the rankings can be followed blindly, and in certain subjects, such as home economics and geology, much will depend upon the curriculum of the individual college. Furthermore, certain inexplicables will undoubtedly occur to anyone. A few possible ones, taken at random, might be the *Wholesale prices of commodities* of the Labor Department, which was considered of no value by 27 of 86 economics instructors; the *Annual report of the American Historical Association*, considered of no value by 15 of 85 history instructors; the *Statistical abstract of the U.S.*, and the *Annual report*

of the Bureau of the Census, considered of no value, respectively, by 27 and 26 of 64 instructors in sociology. The tables should likewise be helpful in connection with questions arising as to new subscriptions, substitution of probably more useful titles for ones currently received, building up collections for special subjects, new curriculum offerings, etc.

The reviewer has only one major criticism to suggest. It is that no consideration is given to the fact that, for all but two subjects, the number of faculty checking is actually smaller than the total number of institutions. Thus only sixty-four instructors each in political science and sociology checked the lists. Do these figures mean one instructor in each subject from each of 64 colleges—or one to half-a-dozen instructors from each of 20 or 30? From what per cent of all the instructors in sociology, etc., in all the colleges were returns received? How many institutions are represented for each subject? (That is, it is conceivable that the returns might be affected if they were concentrated in a small number of institutions.) Information on these points would have an important bearing upon the representativeness of the results, but lack of it probably does not seriously impair the practical usefulness of the study.

Two minor corrections may be noted here, simply for the record: the last word in the title of Table XXIII, as given on p. xi, should apparently have been "Librarians" instead of "Instructors." Returns on the "Library" are given as 76 in Table V, p. 37, and as 74 in Table XXIII, p. 167.

Miss Miller has done a thoroughly worth-while piece of work and has done it well.

J. PERIAM DANTON

Sullivan Memorial Library
Temple University

The selection of books for adult study groups. By MARGARET CHARTERS LYON. ("Teachers College, Columbia University, contributions to education," No. 696.) New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. x+228. \$2.35.

Simply stated, the object of this study is to ascertain some of the qualities that make books dealing with certain subjects interesting to particular groups of people. The study goes beyond the usual exploratory stage of showing what people enjoy reading about and seeks to discover how they evaluate the subjects they read in terms of the special qualities they wish to find in books.

The need for such a study was based upon the assumption that present methods of writing and selecting books for adult study groups are more or less hit and miss; that those who write and choose books do not have clearly in mind standards by which to judge the adequacy of study materials, nor do they understand the ways of approaching special groups through their needs and interests. Educators of adults are faced with conditions entirely different from those which confront teachers of younger children.

The author was aware that leaders of study groups have always had difficulty in finding reading materials that group members would continue to read. People tire easily, find material too difficult, too uninteresting, too childish, or "so remote from life" and alien to their own experience that they cannot become interested. She recognized that multiple interrelationships would have to be explored, that groups must be studied, programs planned, proper materials selected, and finally, the course of study evaluated through tests which would show its effect upon the knowledge and attitudes of the students. Attempting to experiment along these lines within a restricted area, Miss Lyon assembled a list of qualities that make certain books interesting, discovered the degree to which some of these qualities prevailed, and estimated the attitudes of readers toward the selected qualities.

It is worth noting that the printed material used for the study was drawn from the pamphlet literature of current controversial subjects, chosen on the assumption that international conflicts and current economic problems must be studied to be understood and dealt with. Four topics were selected: unemployment, war and peace, changing governments, and unstable money. Twelve pamphlets in all (three for each topic) were carefully analyzed. The most popular proved to be *Unemployment and its remedies* by H. W. Laidler and the least popular was *Inflation: What is the gold standard?* by H. G. Hayes. All pamphlets were described in detail and the reasons for and against popularity were deduced.

Observation was limited to one group in relation to one type of literature, namely, current problems, thus leaving a broad field open for similar reports upon other subjects in relation to other groups. Problems for further research in the selection of reading material are suggested, opening up heretofore unconsidered possibilities. The warning is given that in all experiments procedures must combine the efforts of both laboratory and field worker.

Criticisms were obtained from forty-five readers whose time for the experiment was granted by the Civil Works Administration in New York City. This group was studied as to age, sex, education, positions held, religious and political affiliations, and marital status. Most of the members were college graduates. The author considered them to be fairly typical of other adult study groups. That the reviewer did not consider them typical or a sufficiently large group would limit, but not necessarily destroy, the value of the findings. That only twelve pamphlets were analyzed further circumscribes the general value of the study. However, the methods employed can unquestionably be used in other fields and with other groups. When this is done, the results will cumulate, and the boundaries of dependable knowledge as to what constitutes interesting reading materials will be extended.

The volume is in two sections. The first is for the general reader and educator interested mainly in practical conclusions. Program planning and the usual manner of selecting materials are surveyed, and valuable data are derived

which are used in the reading experiment. The second section contains the results of the experiment, showing how books can be analyzed and groups can be studied.

An interesting procedure was followed in assembling a working list of criteria which lead readers to accept or reject materials. These were collected from four sources: (1) reasons for selecting study material given by writers and workers in adult education; (2) comments upon sections of pamphlets made by the forty-five experimental readers; (3) general criticisms of pamphlets made by the experimental readers; (4) snap judgment of pamphlets by group before reading them.

A total of 4,524 responses thus procured were classified under thirty-eight topical headings which were ranked for frequency of citation. In this collection of criticisms the reviewer missed opinions which might have been drawn from social economists familiar with the fields covered by the pamphlets. This classification involved drawing under each of the thirty-eight standards all shades of expression bearing upon each particular topic. The resulting combined "List of criteria for judging non-fiction literature" is an extremely valuable tool which might be used, with some additions and modifications, for other fields of subject matter. Many of the criteria could be applied in judging the writing of fiction.

One of the many interesting tables presented relates to the criteria most frequently mentioned by the forty-five readers as affecting their attitudes toward the twelve pamphlets. The thirty-eight criteria were grouped under fourteen headings and counted for frequency. The eight most frequently mentioned and hence the most important were: (1) literary quality (including vitality); (2) difficulty; (3) selection and quality of information; (4) literary techniques (stressing clear explanations); (5) techniques of controversy; (6) summary and appeal at conclusion; (7) emotional appeal; and (8) techniques of gaining reader interest. Any writer who is producing books for popular consumption should keep in mind these criteria.

Many difficulties were encountered in the course of the analysis. The number of variables made the isolation of any one almost impossible. Thoroughly reliable conclusions could not be reached for each standard. However, the author felt justified in drawing tentative conclusions relating to four of the thirty-eight criteria, as follows: that the members of the present study group preferred moderately difficult material on a sixth-to-eighth grade level. They prescribed that it be written in nontechnical language, that it avoid extensive historical references and a superabundance of statistics, and that it be presented vigorously, stressing a single viewpoint, though recognizing alternative ones.

This reviewer found some difficulty in drawing from the book its most important features. There seemed to be repetitious and overlapping passages which obscured at times the main progress of the experiment. This difficulty may have been due partly to the fact that the author devoted the first seventy

pages to an overview of the whole study prepared for the general reader and educator interested only in final practical suggestions. This section the reviewer attempted to follow carefully, inasmuch as sufficient time was not available to go into all of the intricate procedures, step by step, upon which the study progressed. It was found, however, that constant reference had to be made to the later pages of the study both for the substantiation and clarification of the statements made in the earlier part and also in order to become familiar with the interesting statements and illustrations of specific cases which lent vitality to the report and from which conclusions were drawn. It would seem that the voluminous amount of detailed information could have been better organized.

The book admittedly falls short of covering the broad aim expressed in its title, since but one field of subject matter was considered and but one group (and that above average in educational background) was studied under artificially perfect conditions.

Viewed, however, as a superb analysis of reading material in a restricted field, this study will be a lasting contribution to the evaluation of reading materials for group study.

GRACE O. KELLEY

*Queens Borough Public Library
Jamaica, N.Y.*

My vocation: by eminent Americans. Edited by EARL G. LOCKHART. New York: H. W. Wilson, 1938. Pp. 334. \$2; \$1.50 to libraries.

Twenty-three eminent Americans have contributed personal ideas on their vocations, influenced by their success in their chosen callings, to this volume dedicated to youth. These essays fluctuate from the sentimental advice of the agriculturist who quotes a florist as saying, "To grow beautiful roses in your garden, you must have beautiful roses in your heart," to the brief, hearty, pungent letter on the newspaper business, written by William Allen White.

Youth today is not greatly helped by the generalizations on successful careers written by people who because of superior endowment and opportunity have, through whatever struggle, achieved great success. There is a certain encouragement in the "success" biography, but these sketches are too brief and give too little space to the struggle, too much to the joy of achievement in an age when youth has too little opportunity. The reader who thinks this book will give something of practical advice for vocational guidance will be disappointed. It tells no one how to become a librarian, a teacher, a doctor, or how to test the vague inclinations toward such callings, or what are the opportunities for employment in the field for the beginner. The oversimplification of this complex subject impairs the constructive role that such a book should play in the lives of young people concerned with this problem.

JENNIE M. FLEXNER

New York Public Library

BOOK NOTES

America's young men. The official who's who among the young men of the nation, Vol. III: 1938-39. Edited by DURWARD HOWES. Los Angeles: American Publications, Inc., 1938. Pp. cxiii+655. \$10.

Volume III of this biographical dictionary of contemporaries lists 6,532 young men, all forty years of age or less. Although this outnumbers Volume II by only 522, more than half of those in the present volume have never been listed before. Names of persons whose biographies are omitted because of age ineligibility are listed with cross-references to Volume II. Other features of the book are a statistical summary including age distribution, political and church affiliations, education, and other significant facts; a geographical index, listing names by state and city; and an occupational index.

Classified list of periodicals for the college library. 2d ed. rev. and enl. By GUY R. LYLE and VIRGINIA M. TRUMPER. ("Useful reference series," No. 63.) Boston: F. W. Faxon, 1938. Pp. xi+96 (lithoprinted). \$1.25.

The original edition of this "Classified list" has been a basic tool for college libraries. The present revised edition records the teeming editorial and publishing activity of the period, corrects various errors in the first edition, and increases the titles included from 376 to 413. Annotations have been revised. A group of music has been added, engineering has been dropped, and book-review periodicals are set out in a separate list. Twenty-nine classified lists result. Library of Congress card numbers are indicated, thus reflecting the growing use of the highly informative L.C. cards in shelf-lists, periodical catalogs, and union lists. All entries have been checked against such recent regional catalogs of college-library periodical holdings as the Ohio list, the Litchfield Philadelphia list, and the Skaggs Southern list. However, the original "pooled judgment" method of compilation was continued, final decisions being made by the librarian-editors. Titles recommended for first purchase by libraries of limited means are starred. All in all, the new edition is improved and is indispensable. The Table of Contents would perhaps be more conveniently placed immediately following the title-page. The book is a good job of lithoprint; the right-hand margins are mainly "self-justified" in neat form.

Dime novel bibliography, 1860-1928. By CHARLES BRAGIN. Brooklyn: Charles Bragin, 1938. Pp. iv+29 (lithoprint). \$1.00.

This is not properly a bibliography but a priced list of several hundred items extracted from runs of one hundred of the "dime novel" libraries and "story paper" magazines devoted to the western, detective, and other adventure literature. The main groupings are, logically, by publisher and series, but the selection of titles was apparently done at random. The annotations are brief but informative; there are cross-references and an index of publications. A pleasant feature is the group of reduced cover illustrations which form the wrapper. The pamphlet has its usefulness in its descriptions of the series included and in a supplementary list of fifty "other dime novel publications," but the prices, which it suggests "may be accepted as fair valuation guide," are in many cases double or more the quotations of other dealers.

Apparently there is a demand for information in this field of collecting. *Dime novel bibliography, 1860-1928* was originally issued in mimeograph form early this year but

is now selling in lithoprint. The individual or institutional collector and the student of popular native literature will still find his best guides to the contents of the dime novels, their bibliography, and their publishers in Edmund Pearson's *Dime novels*, in a series of articles by Ralph Admari which were published in the *American book collector* in 1933, 1934, and 1935; and in catalogs of the collections formed by Dr. Frank P. O'Brien—one sold at auction in May, 1920, and a second, larger group of 1,400 Beadle publications and 171 items from other houses, presented to the New York Public Library and admirably cataloged in that library's *Bulletin*.

Graduate theses and dissertations, 1892-1937. Compiled by BEVERLEY RUFFIN. ("Pennsylvania State College bulletin, library studies," No. 1.) State College, Pa.: Pennsylvania State College Library, 1938. Pp. ii+182.

Miss Ruffin and her cataloging staff have done a good piece of work in this author-list of 2,093 graduate essays. The departmental and chronological indexes are convenient. The Subject Index, which occupies forty-six double-column pages, is extremely useful and unusual in a list of this sort.

Handbook for the use of the library collections, supplemented by a guide to reference books. Baltimore: Enoch Pratt Free Library, 1938. Pp. 68.

In contrast to the usual brief leaflet descriptive of the public library, this handbook gives the reader a more extensive acquaintanceship with the library, but still manages to avoid the stuffiness of many long reports. The illustrations, the use of colored headings and spaces between paragraphs to break up the page, and the excellent printing make this an easy pamphlet to read. The material essential to a handbook—descriptions of the use of the catalog, the classification system, "finding the best books on a subject," the subject departments and special rooms, library hours, other libraries in the city, and the Index—is all readably presented. The description of subject departments, though lengthy, is an interesting and helpful section, and the note on other Baltimore libraries is an item too often overlooked.

Janitorial service in small libraries. By ROBERT G. NEWMAN, MILES A. BARTLETT, and DAVID E. THOMPSON. Pittsfield, Mass.: Printed for the authors, 1938. Pp. 32. \$0.50.

This handbook is the outgrowth of personal experiences of the executive assistant, a member of the circulation department, and the building superintendent of the Berkshire Athenaeum at Pittsfield, Massachusetts. It is designed to provide concise, practical suggestions for the special janitorial service required in small libraries and is dedicated to the use of librarians who recognize the need for a handy guide in directing the work of janitors. It might also serve as a staff manual for the use of the janitor in a small library, for it is sufficiently comprehensive and detailed in enumerating his duties. The manual proceeds in orderly fashion from the care of the walks and grounds and the external maintenance of the building to the internal maintenance and the opening and closing of the building and concludes with a typical daily schedule. It is paper bound and neatly printed and has several blank pages which may be used to list the actual day-by-day janitorial program of any small library. Administrators of small and medium-sized libraries should find this publication a useful investment.

Mexico in the sixteenth century: an exhibition at the Huntington Library. San Marino, Calif.: Henry E. Huntington Library and Art Gallery, 1938. Pp. 18. \$0.10, post-paid.

In observance of Founder's Day at the Huntington Library on February 28, 1938, Dr. Frank Aydelotte spoke on the topic "Elizabethan seamen in Mexico and ports of the Spanish Main." The exhibition which this handlist explains is the outgrowth of a

display arranged for the occasion. David Davies, of the Department of Exhibitions, has gathered together a number of the printed narratives of the Spanish conquistadors, explorers, and English navigators. The exhibition, numbering thirty-eight items in all, includes some of the earliest histories and imprints of Mexico and several contemporary manuscripts. Around this display Mr. Davies has written a historical account of the conquest and colonization of Mexico.

Unpublished letters of Bayard Taylor in the Huntington Library. Edited with an Introduction by JOHN RICHIE SCHULTZ. San Marino, Calif.: Trustees of the Henry E. Huntington Library and Art Gallery, 1937. Pp. xxvi+231. \$3.00.

In reading these hitherto unpublished letters of Bayard Taylor, one realizes that letters are source material far superior to memoirs, which are so often written in years remote from the incidents discussed. While living, Bayard Taylor was popular as a lecturer, traveler, writer, and poet. His reputation has lessened since his death. He was actively identified with important men and movements of his day, and his letters are an invaluable source for American literary history. His short diplomatic career in Russia during the Civil War enabled him to give us useful knowledge concerning that country's attitude at the time.

Through these letters we see Bayard Taylor as a warm-hearted man, alert to everything around him, and concerned with many phases of the life of his day. He was misled, however, about his poetry, which was to him his greatest gift, but which seems to us now a thin, overworked vein of romanticism.

Shortly after his death an official two-volume *Life and letters* was issued. This new volume adds all we need to know of this man's life. It prints, for the first time, one hundred and twenty-eight letters written by Taylor drawn from the rich manuscript resources of the Huntington Library. Scholars and librarians will be grateful to have one more literary figure completely and definitively treated. We are indebted to the editor, Professor John Richie Schultz of Allegheny College, for one valuable feature: each letter is preceded by a sentence giving its chief subject and import. This volume, which carries the distinguished format of books issued by the Huntington Library, is well printed and has a full Index.

White's conspectus of American biography. Compiled by the EDITORIAL STAFF of the *National cyclopaedia of American biography*. New York: White, 1937. Pp. viii+455. \$15.

This is a revised and enlarged edition of a *Conspectus of American biography* which was published in 1906 with the indexes to the *National cyclopaedia of American biography*. The general plan of this compilation is to present lists of important American names in chronological form. In addition to lists of the holders of public offices—colonial, continental, and United States congresses; presidents, vice-presidents, cabinet officers, heads of federal agencies and bureaus; diplomatic officers; federal judges, except district judges; state governors and chief justices; army and navy commanders; governmental and military officers of the Southern Confederacy—the book contains lists of the heads of institutions—colleges, museums, observatories, churches with the episcopal form of government—lists of the presidents of professional, scientific, and artistic societies, of American recipients of numerous awards and honors, and a list of "preëminent Americans" classified by professions. In addition to these chronological lists there is a list of prominent Americans who have appeared in fiction, with title and author cited, and a list of pseudonyms and soubriquets accompanied by the actual names. There is an extensive calendar of the anniversaries of historical events and births and a topical index. References to the volume and page of the *National cyclopaedia of*

American biography accompany all name entries, except for members of the United States House of Representatives and for persons whose bibliographies have not yet appeared in that series.

Obviously, the *Conspectus* is a useful reference tool for the rapid finding of brief answers to questions regarding the personalia of many aspects of American history. Questions as to who was what in the cabinet when someone else was President, and as to when Gifford Pinchot became chief of the forestry service, and who succeeded him, find ready answers. One can, of course, always quarrel, both on the scores of inclusion and exclusion, with lists of pre-eminent Americans. The lists included here are taken solely from the *National cyclopaedia*. However, such reservations do not qualify the judgment as to the usefulness of this reference work.

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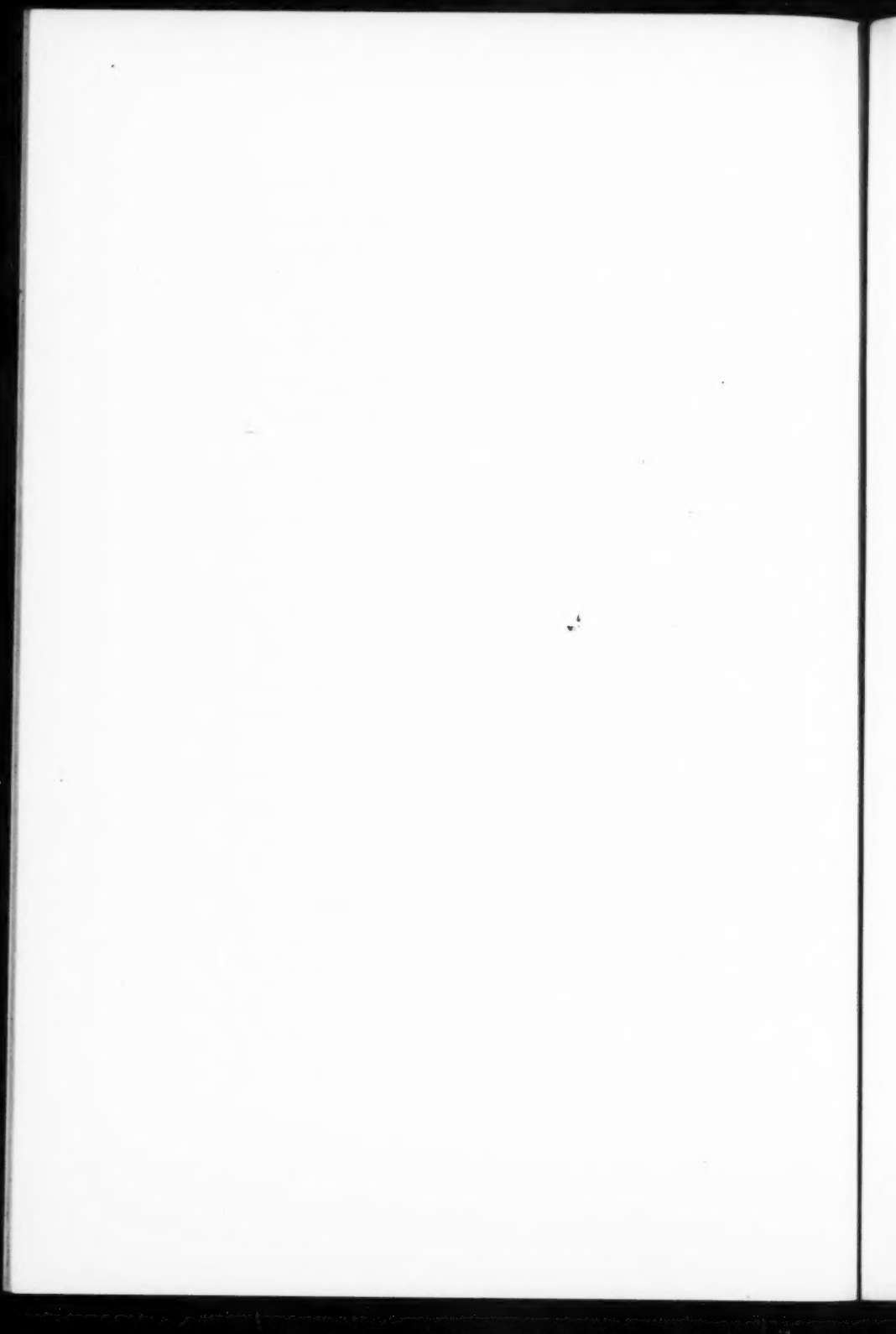
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- Annotations on small loan laws; based on the sixth draft of the Uniform Small Loan Law.* By F. B. HUBACHEK. ("Small loan series.") New York: Russell Sage Foundation, 1938. Pp. lxxv+255. \$3.00.
- Annual catalogue of Australian publications.* No. 2, 1937. Compiled under the direction of KENNETH BINNS. Canberra, Australia: Published by authority of the Commonwealth National Library Committee, 1938. Pp. vii+134. Not for sale.
- L'Architecture d'aujourd'hui.* Revue mensuelle, 9^e année, No. 3, Mars, 1938 ("Bibliothèques"). Seine, France, 1938. Pp. 102. France et colonies, Fr. 25; étranger, Fr. 33.
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- Вісті академії наук української радянської соціалістичної республіки. No. 6-7. Київ: видавництво академії наук УРСР, 1937. Pp. 146.
- Catalogus van de handschriften der Koninklijke Nederlandsche Akademie van Wetenschappen, in Bruikleen in de Koninklijke Bibliotheek.* By D. J. H. TER HORST. 'S-Gravenhage: Algemeene Landsdrukkerij, 1938. Pp. 66.
- A classification for medical literature.* 2d ed., rev. and enl. Compiled by EILEEN R. CUNNINGHAM. Nashville, Tenn.: Cullom & Ghertner, 1937.
- Collection Internationale du Livre d'Art Contemporain, au Musée des Arts Decoratifs de la Chambre de Commerce et d'Industrie à Prague, *Les Comités d'honneur.* Prague, 1938. Pp. 70+18 pages of plates.
- Consumers' bookshelf: a bibliography of publications on commodity buying and other consumer problems.* By CONSUMERS' COUNSEL DIVISION, AGRICULTURAL ADJUSTMENT ADMINISTRATION, U.S. DEPARTMENT OF AGRICULTURE, AND CONSUMERS' PROJECT, U.S. DEPARTMENT OF LABOR. Washington, 1937. Pp. viii+100. \$0.15.
- County libraries: retrospect and forecast.* By E. J. CARNELL. With an Introduction by J. D. COWLEY. London: Grafton, 1938. Pp. 260. 10s. 6d. net.

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- Deutsche Bibliotheken unter dem Einfluss von Humanismus und Reformation. Ein Beitrag zur deutschen Bildungsgeschichte.* Von HEINRICH KRAMM. ("Zentralblatt für Bibliothekswesen," Beiheft 70.) Leipzig: Harrassowitz, 1938. Pp. xxiv+304.
- Experimenting together. The librarian and the teacher of English.* By FRIEDA M. HELLER and LOU L. LABRANT. Chicago: American Library Association, 1938. Pp. 84. \$0.75.
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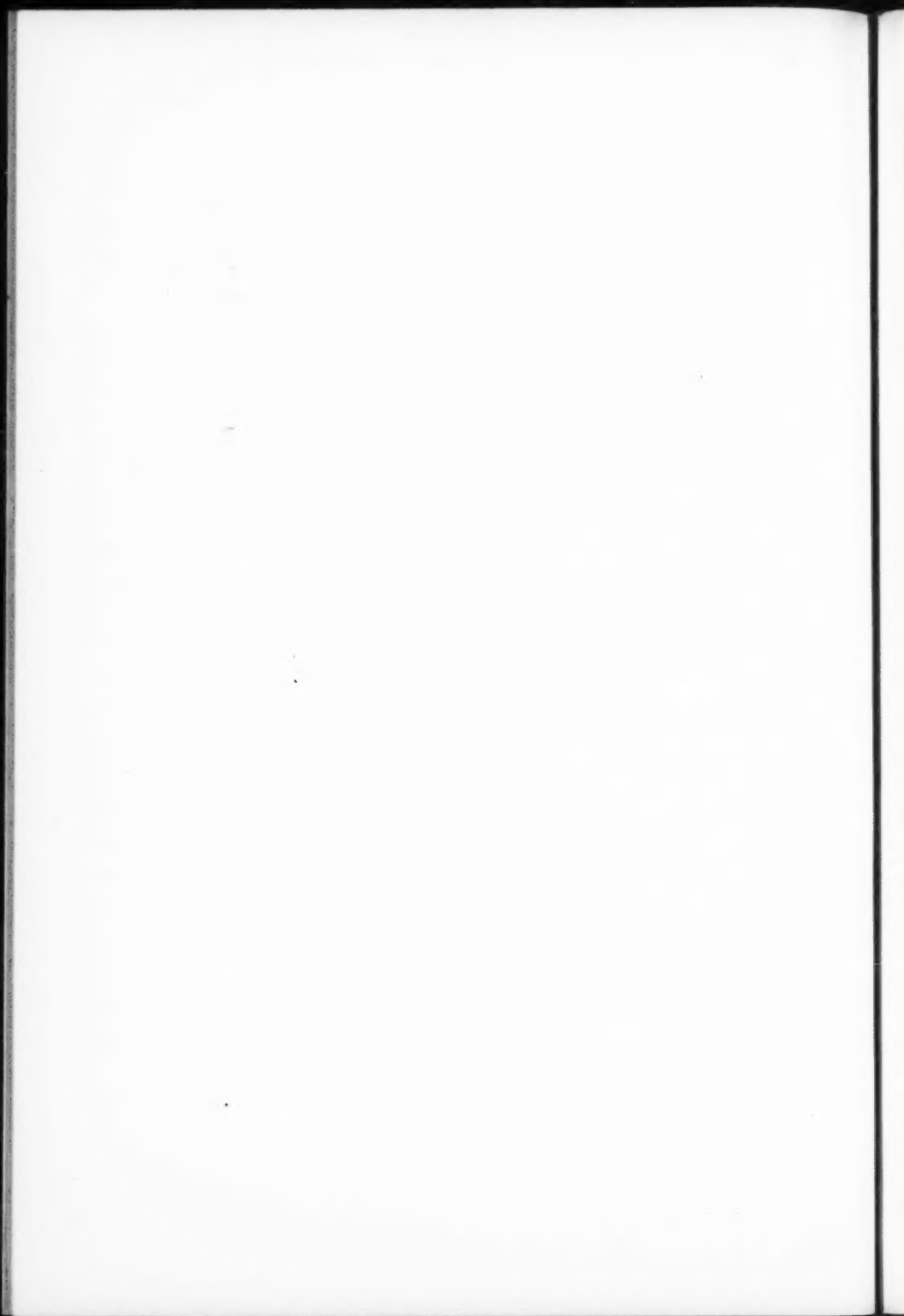
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